

# Psychological Abstracts

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# Psychological Abstracts

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## GENERAL

### OBITUARIES & BIOGRAPHY

2860. ———. **Leopold Bellak.** *Rev. Psychol. appl.*, 1959, 9, 187-191.—Biography, portrait, and 70-item bibliography.—*W. W. Wattenberg.*

2861. ———. **Richard Meili.** *Rev. Psychol. appl.*, 1959, 9, 119-120.—Biography, brief list of principal works, and portrait.—*W. W. Wattenberg.*

2862. **Aron, Willy.** **Notes on Sigmund Freud's ancestry and Jewish contacts.** *Yivo Annu. Jewish soc. Sci.*, 1956-57, 11, 286-295.—Although Sigmund Freud's father, Jacob Freud, came from a strongly orthodox Jewish environment, he (Jacob) was himself apparently of more liberal inclinations. He wrote a florid Hebrew and probably gave his young son a rich traditional Jewish background. Sigmund's mother was also from a notable and learned Jewish ancestry. Likewise, his wife, Martha Bernays, came of a distinguished and extremely orthodox family. Though not an observant Jew, Freud had strong emotional ties to Judaism and to Jewish causes.—*S. Glasner.*

2863. **Bakan, D. John Broadus Watson: 1878-1958.** *Psychol. Rep.*, 1960, 7, 81-82.—The role of John Broadus Watson in the development of psychology is assessed in personal terms.—*C. H. Ammons.*

2864. **Kanner, L.** (U. Minnesota) **Itard, Seguin, Howe: Three pioneers in the education of retarded children.** *Amer. J. ment. Defic.*, 1960, 65, 2-10.—Brief accounts of the work of Itard, Seguin, and Howe in behalf of retarded children are presented. Biographical data and publications of each man are listed.—*V. M. Staudt-Sexton.*

2865. **McCreary, J. R. Thomas Henry Scott, M. A.** (N.Z.), Ph.D. (McGill). *Aust. J. Psychol.*, 1960, 12, 1-3.—Obituary.

(See also Abstract 3028)

### HISTORY & SYSTEMS

2866. **Ben-David, Joseph.** (Hebrew U.) **Scientific productivity and academic organization in nineteenth century medicine.** *Amer. sociol. Rev.*, 1960, 25, 828-843.—A count of medical discoveries made in France, Britain, Germany and the United States between the years 1800 and 1925 indicates that there were sharp changes over time in each nation's relative share of medical discoveries. "French supremacy in the beginning of the [nineteenth] century with Britain a close second gave way to an overwhelming preponderance of German discoveries through the second half of the last century. The American share was rapidly increasing from the 1880's and became the largest by 1910-1919 . . . the relative decline of the European countries started prior to" World War I. These changes are explained

as a result of the various degrees of competitiveness in the academic systems of these countries. "The American and German systems were competitive (because they were decentralized); the French and the British were not. Academic competition forced upon the German system, and later the American system as well, decisions . . . concerning the recognition of specialized disciplines, creation of research facilities, and expansion of research training [which] led to the emergence of regular scientific careers."—*L. Berkowitz.*

2867. **Courville, Cyril B.** (Coll. Medical Evangelists, Los Angeles, Calif.) **Craniocerebral injuries as found in myths, legends, and folk tales of the ancient world.** *Bull. Los Angeles Neurol. Soc.*, 1960, 25, 193-210.—This is another of the reviews by Courville, a medical historian, of the literature of ancient times. The author ranges over the ancient world from Greece to Germany, Scandinavia, the British Isles, and France; and eastward to Persia, India, China, and Japan. The myths, legends, and folk tales include excerpts from the stories of the Hydra and Hercules, Apollo and Hyacinthus, Diana and Orion, the Nibelungenlied, Beowulf, Thor, Sirs Tristram and Marhaus, King Arthur's death, the Chanson Roland, the monkey gods and the Rakshasas of India, the Shahnamah of Persia, and Raiko and the Goblin Spider in Japan. These tales reflect "some of the concepts (about head injuries and their effects) held by laymen throughout the centuries."—*I. N. Mensh.*

2868. **di Grasso, P. G. Gordon W. Allport e la psicologia della personalita.** [Gordon W. Allport and the psychology of personality.] *Orient. pedagog.*, 1959, 6, 605-631.—Allport is described as a pioneer in emphasizing the dynamic character of personality and providing "a synthetic view of personality which seems to be very effective from the viewpoint of a realistic theory and practice of education." (English summary and a 134-item bibliography of Allport's publications)—*C. T. Morgan.*

2869. **Lasswell, H. D. Approaches to human personality: William James and Sigmund Freud.** *Psychoanal. psychoanal. Rev.*, 1960, 47(3), 52-68.—The article is introduced by Benjamin Nelson. James was a philosopher, organizer, general psychologist, tactician, balanced presenter of human nature, lecturer, and mixer. Freud was a scientist, contributor, psychopathologist, expressor of counter-mores, Hobbesian presenter of human nature, and nonmixer. Both James and Freud were preoccupied with an inclusive map of knowledge of man, with man's subjectivity, with observational procedures, with resentment against established methods. Both had panoramic and dramatizing intelligences.—*D. Prager.*

2870. **Murchison, Carl.** (2 Commercial St., Provincetown, Mass.) **Recollections of a magic decade at Clark: 1925-35.** *J. gen. Psychol.*, 1959, 61,

3-12.—An account of the establishment of 5 psychological journals and the creation of 5 psychological handbooks.—*H. Rujä.*

2871. **Ramul, Konstantin.** (Tartu State U., Estonia, USSR) **The problem of measurement in the psychology of the eighteenth century.** *Amer. Psychologist*, 1960, 15, 256-265.—Hitherto "largely unknown opinions of a number of eighteenth century philosophical and nonphilosophical writers regarding the possibilities and methods of psychological measurements" are considered in approximately chronological order. Writers mentioned include Christian von Wolff, Andrew Michael Ramsay, Alexander Gottlieb Baumgarten, Christian August Crusius, Pierre-Louis Moreau de Maupertuis, Friedrich Johann Buck, Moses Mendelssohn, Gottfried Ploucquet, Charles Bonnet, Hans Bernhard Mérian, Johann Heinrich Lambert, Johann August Eberhard, Gottlieb Friedrich Hagen, Johann Gottlieb Krüger, and Christian Albrecht Körber. "The question of the measurement of mental phenomena did not by any means remain alien to the inquiring genius of the eighteenth century."—*S. J. Lachman.*

2872. **Watson, Robert I.** (Northwestern U.) **The history of psychology: A neglected area.** *Amer. Psychologist*, 1960, 15, 251-255.—"I propose to document the extent of the current neglect of the history of our field, to suggest some of the factors which help to bring about this neglect, to answer certain possible criticisms of devoting one's time to advancing knowledge of our history, and to try to show some positive values to be found by research in our history." During a 20-year period (1938-57) only 12 out of 1207 articles published in the *American Journal of Psychology*, 13 of 937 articles in the *Journal of General Psychology*, and 13 of 682 articles in the *Psychological Bulletin* were historical in nature.—*S. J. Lachman.*

(See also Abstract 3387)

#### PHILOSOPHY OF SCIENCE

2873. **Berryman, R.** **A physical model for the experiment.** *Percept. mot. Skills*, 1960, 11, 3-12.—"A switching circuit model for the controlled experiment is described. Various features of the model represent an experimental variable, three independent variables, and two dependent variables. Observations of its operation under different conditions exemplify types of possible relations between variables, illustrate Mill's canons of experimental inference, and provide a basis for the discussion of several important points in research methodology."—*C. H. Ammons.*

2874. **Brain, W. Russell.** **Space and sense-data.** *Brit. J. Phil. Sci.*, 1960, 11, 177-191.—Traditional sense-datum theory involves the concept of private perceptual spaces. This concept has, however, been alleged to be self-contradictory. The author proposes a revised sense-datum theory which does away with the belief in a multiplicity of private perceptual spaces. This theory reconciles "the representationalist view of perception with the views of some at least of the realists."—*P. E. Lichtenstein.*

2875. **Fine, R.** **The measurement problem in psychology.** *Psychoanal. psychoanal. Rev.*, 1960, 47 (3), 91-105.—Behaviorism and system-building side-

step the measurement problem. Recent studies in animal psychology criticize the neglect of the internal environment by American psychology. Much current psychological experimentation is to crudely empirical and fails to specify adequately the theoretical framework within which it is done. "Psychoanalytic psychology is the only theory extant which recognizes the measurement problem and is prepared to account for it." The S in a psychological experiment will offer variable cooperation for conscious and/or unconscious reasons. Clinical psychology is not derivable from any hypothetical pure learning theory. "As the measurement problem is given its due weight, the whole concept of scientific method in psychology must be reformulated."—*D. Prager.*

2876. **Gladin, Leo L.** (Michigan State U.) **Observers' and metaobservers.** *Psychol. Rec.*, 1960, 10, 229-239.—The psychologist "is required to observe" organism-organism and organism-environment relationships "and yet serve only as an instrument." It is this detached status of a metaobserver which the psychologist as a scientist must attain. Aside from eliminating the "human tendency to anthropomorphize," the theorist in psychology should recognize also that "the method employed by sciences-of-status . . . can provide no magic key." Physicalism was a product itself of "knowledge of human and organismic frailty." Attaining the complete status of metaobserver, "the psychologist would attain the status of scientist without any more formal initiation by rite or prescription."—*R. J. Seidel.*

2877. **Guzie, Tad W.** (St. Louis U.) **St. Thomas and learning theory: A bibliographical survey.** *New Scholast.*, 1960, 34, 275-296.—A critical survey of everything published since 1800 on Thomistic educational theory and philosophy of education. The author notes the change, in studies of recent decades, from "exaggerated intellectualism" to an increased emphasis on the senses, and also the fact that American scholars have made little contribution to the field. He concludes that since Thomism does not have "a theory of learning or a philosophy of education as such," much creative work remains to be done, starting with a clear distinction between logical and psychological explanations.—*J. Lyons.*

2878. **Howe, E. S.** (U. Maryland School Medicine) **Quantitative motivational differences between volunteers and nonvolunteers for a psychological experiment.** *J. appl. Psychol.*, 1960, 44, 115-120.—How do volunteers compare with paid Ss in research? What part does anxiety play in volunteering? "Two classes each of 89 students were given the short form of the Taylor MAS (the SMAS), the Christie and Budnitzky Short Forced-Choice Anxiety Scale (the SFCAS), and a 20-item scale purporting to assess Murray's n Harmavoidance." 2 weeks later the Ss were invited to participate as paid Ss in an "experiment." Need for cash and fear of the electric shock were assessed. Volunteers needed cash more, feared the shock and harm less. "As in other reported studies of this kind, the SMAS did not at all discriminate volunteer from other Ss; nor in fact did the SFCAS."—*J. W. Russell.*

2879. **Lyons, Joseph.** (VA Hosp., Lexington, Ky.) **Cinematography as a method in research.**

*J. counsel. Psychol.*, 1959, 6, 238-244.—Motion picture photography is presented as a means of combining experimental and correlational methods in research in mental hospitals.—*M. M. Reece.*

2880. McNemar, Quinn. (Stamford U.) **At random: Sense and nonsense.** *Amer. Psychologist*, 1960, 15, 295-300.—"It is often said that psychologists are captivated by the magic of words." One example of this is the epidemic use by psychologists of the word 'design.' "Despite glib talk about using factor analysis to test hypotheses, practically no users of factor analysis ever test hypotheses." A psychologist may "trudge off weighted down with a box full of statistical tools in search of a research problem that permits him to display skill with his tools." Most psychologists "without intentional eavesdropping know that occasionally their theory oriented colleagues simply discard all data of an experiment as bad data if not in agreement with the theory, and start over. The theory is, of course, always good." The theorist who has the one and only approach and solution to all, or nearly all, psychological problems "tends to lure those among us who have a low tolerance for the ambiguity that flourishes in psychology." This "model business is nothing more than a new name for old hat stuff. . . . The question of the usefulness of mathematical models and, to a certain extent, the value of high powered statistical techniques is debatable."—*S. J. Lachman.*

2881. Mandler, George. **Stimulus variables and subject variables: A caution.** *Psychol. Rev.*, 1959, 66, 145-149.—Covariations of 2 variables are not adequately defined unless additional specification states whether the variables are associated with situations or with stimuli. Relationships across Ss and across situations are rarely functionally dependent. An example constructed to show an extreme case and 2 research studies illustrate the importance of a complete specification of variables.—*W. J. Koppitz.*

2882. Popper, Karl R. (U. London, England) **The logic of scientific discovery.** New York: Basic Books, 1959. 480 p. \$7.50.—This treatise on scientific theories and methods is a translation by its author of the 1934 Viennese edition, with considerable rearrangement and the addition of numerous appendices and notes. Scientific theories are said to be systems of statements which logically imply some singular, existential propositions which in principle could be falsified by empirical observations. Metaphysical theories lack such implications but many scientific theories have been derived historically from metaphysical speculations. The latter are not meaningless but only untestable as initially formulated. No scientific theory is established as a truth about reality, but is vindicated for the purposes of a discipline by repeated failures to falsify it by means of approved empirical methods. The probability value of theories is interpreted in parallel terms. The concepts of testability and simplicity are systematically examined. Applications are made to a number of controversies in recent and contemporary physics. Some attempt is made to show the relationship between the defended position and the positions of various historical thinkers and schools of thought.—*R. F. Creegan.*

2883. Short, James F., Jr. (U. Chicago) **Differential association as a hypothesis: Problems of**

**empirical testing.** *Soc. Probl.*, 1960, 8, 14-25.—In operationalizing a theory to make it researchable, precisely what one must do is to define the variables and their functional relationships. Research on a theory such as differential association, the variables and functional relationships of which, though they are not without meaning, are so imprecisely defined, is necessarily a theoretically creative task. What is needed is a statement of the theory of differential association into a series of verifiable propositions from which verifiable predictions may be derived. (22 ref.)—*R. M. Frumkin.*

2884. Thorpe, J. G., & Baker, A. A. (Banstead Hosp. Sutton, Surrey, England) **Statistics, science, and psychiatry: A reconsideration.** *Arch. gen. Psychiat.*, 1960, 3, 389-390.—Statistics must not be applied in psychiatry without sufficient evidence that the population which is used for generalizations is actually a random or representative sample of the larger population to which the generalizations are applied.—*L. W. Brandt.*

2885. Winthrop, Henry. (U. Wichita) **Psychology and value: A critique of Morris' approach to evaluation as behavior.** *J. gen. Psychol.*, 1959, 61, 13-37.—Charles Morris' investigation of valuing as reported in his *Varieties of Human Value* is criticized for semantic and statistical flaws and for lack of relevance of the conclusions to prediction of behavior. (24 ref.)—*H. Ruja.*

#### STATISTICAL METHODS

2886. Arrow, Kenneth J., Karlin, Samuel, & Suppes, Patrick. (Eds.) **Mathematical methods in the social sciences.** Stanford, Calif.: Stanford Univ. Press, 1960. viii, 365 p. \$8.50.—These 23 papers of the first Stanford Symposium on Mathematical Methods in the Social Sciences held in June 1959 cover topics in economics, management science, and psychology. The psychology papers cover: stochastic process models for intelligence test scores, learning and discrimination models, choice behavior, response latency, utility, and measures of worth in item analysis and test design.—*D. A. Grant.*

2887. Bradley, R. A., Walpole, R. E., & Kramer, C. Y. **Intra- and inter-block analysis for factorials in incomplete block designs.** *Biometrics*, 1960, 16, 566-581.—An extension of the use of factorial treatment combinations in classes of partially balanced incomplete block designs. The recovery of inter-block information, significance tests, estimators of factorial effects, and efficiencies of contrasts are obtained for each design considered.—*R. L. McCornack.*

2888. Buel, William D. (Pure Oil Co., Chicago, Ill.) **A simplification of Hay's method of recording paired comparisons.** *J. appl. Psychol.*, 1960, 44, 347-348.—Although Hay's method enables the recording of compared comparisons on one sheet of paper rather than on numerous paired stimulus cards, as before, it can be made even simpler by reducing the number of necessary comparisons by one half. ". . . the method presented here is probably not much shorter of completion for small numbers of comparison than is the Hay method, however, for large numbers of comparisons the time and effort saved and the number of comparisons obviated by the proposed

method could amount to appreciable savings."—*J. W. Russell.*

2889. **Cattell, R. B.** Evaluating interaction and non-linear relations by factor analysis. *Psychol. Rep.*, 1960, 7, 69-70.—"It is a rather widespread stereotype among psychologists that the factor analytic model cannot contribute to understanding of relationships involving interaction or non-linear functions. Although the basic model does not allow interaction (but only covariance), or respond to non-linearity in relationships, factor analysis can be used in properly planned multivariate experiment designs to yield information on interaction effects among factors and on non-linear, e.g., 'moderator variable,' relation of factors to variables, in ways here delineated."—*C. H. Ammons.*

2890. **Cattell, Raymond B., & Muerle, John L.** (U. Illinois) The "maxplane" program for factor rotation to oblique simple structure. *Educ. psychol. Measmt.*, 1960, 20, 569-590.—"Since present analytical methods have certain limitations, the maxplane method has been developed with these 5 important characteristics: (a) permits obliqueness, (b) works directly maximizing the hyperplane count, (c) put no restriction on the factor patterns and their relationships, (d) permits parameters to be inserted conveniently into the program in response to statistical and other properties of the given research, (e) tends to select first the hyperplanes bearing the factors of largest variance. "... simple structure is that which maximizes the total number of zero loadings for  $k$  hyperplanes in  $k$  space." This definition distinguishes "maxplane" from oblimax, quartimax, varimax, and minimax. General and technical descriptions of the maxplane program are given. Actual use of the program has revealed some limitations which must be overcome before a "fully effective and dependable automatic rotation program" will be available.—*W. Coleman.*

2891. **Clostermann, Gerhard.** (Forschungsinstitut Psychologie Arbeit Bildung, Gelsenkirchen, Germany) Beiträge zur mathematischen Psychologie. [Contributions to mathematical psychology.] (Gelsenkirchen Psychologisches Institut Publ. No. 8) Münster, Germany: Aschendorffsche, 1960. x, 62 p. DM 7.50.—This is the 3rd publication on the author's "percentage-quotient-method" for simplified calculation of correlations from  $2 \times 2$  tables requiring 2 operations— $100(a+d)/N$ —and the author's tables (published earlier), whereas Thurstone's tetrachoric  $r$  requires 32 (22 different) operations plus nomographs and Pearson's contingency-coefficient requires 27 operations plus chi square tables. (Appendix: bibliography of 126 published and 232 unpublished papers; history and activities of the institute)—*E. Bakis.*

2892. **Danford, M. B., Hughes, Harry M., & McNee, R. C.** On the analysis of repeated-measurements experiments. *Biometrics*, 1960, 16, 547-565.—Assumptions for and techniques of the usual univariate analysis of variance procedure for repeated measurements on the same individuals over time are given. Tests for these assumptions are given and illustrated. Multivariate analysis of variance procedures are then given for the case where the assumptions are not justified.—*R. L. McCornack.*

2893. **DeSoto, Clinton B., & Kueth, James L.** (Johns Hopkins U.) On the relation between two variables. *Educ. psychol. Measmt.*, 1960, 20, 743-749.—Over-use of  $r$  has prevented psychologist's from doing more complete analyses of data. Frequently,  $x$  may set an upper or lower limit resulting in heteroscedasticity. Closer attention should be paid to characteristics of arrays as number and location of modes, skewedness, and peakedness.—*W. Coleman.*

2894. **DuBois, Philip H., & Manning, Winton H.** (Washington U., St. Louis) An analytically meaningful approach to matrix inversion. *Educ. psychol. Measmt.*, 1960, 20, 705-712.—"The use of scalar notation in the development of the inverse of a matrix of  $r$ 's has been demonstrated as one example of the analytically meaningful approach to matrix computation. Variables, as residualized with respect to other variables, remain identified at all times. There are numerous usable by-products, either in the form of coefficients within the matrices, or in the form of coefficients readily found from matrix elements."—*W. Coleman.*

2895. **Edgerton, Harold A.** (Richardson, Bellows, Henry & Co., NYC) A table for computing the phi coefficient. *J. appl. Psychol.*, 1960, 44, 141-145.—"When faced with a research job which entailed the computation of at least 1770 phi coefficients, some way to reduce the work was sought. The answer was the accompanying table." The formula given was: "for various values of  $p_{12}$ , [and] for values of  $S = \sqrt{p_1 p_2}$  from .20 to .80."—*J. W. Russell.*

2896. **Eisen, Jacob N.** (United States Dept. Agriculture, Washington, D.C.) A note on the application of orthogonal polynomials to data on palatability when the levels of a treatment are unequally spaced. *Food Technol.*, 1960, 14, 663-664.—Orthogonal polynomials were used to evaluate panel scores for flavor of fresh broccoli cooked by boiling for 4 unequally spaced times. A quadratic equation, formed by adding several terms to the linear equation, was calculated for estimating flavor score from cooking time. It is demonstrated that the goodness of fit of the linear, quadratic, and cubic regression curves can be independently and successively tested for significance.—*D. R. Peryam.*

2897. **Eysenck, H. J.** (U. London, England) The concept of statistical significance and the controversy about one-tailed tests. *Psychol. Rev.*, 1960, 67, 269-271.—"... verbal statements regarding 'significance' are at best supererogatory restatements in an inconvenient dichotomous form of results already properly stated in terms of a continuous system of  $p$  values; at worst they carry unjustified surplus meaning of an entirely subjective kind under the guise of an objective and mathematically meaningful statement. ... It is suggested that the accurate and factual statement of probabilities (two-tailed) should be mandatory and that all subjective considerations, arguments, and judgments should be clearly separated from such factual statements."—*C. T. Morgan.*

2898. **Gaito, J.** Expected mean squares in analysis of variance techniques. *Psychol. Rep.*, 1960, 7, 3-10.—"The general mathematical model for expected mean squares in complete factorial analysis of variance designs is presented and four specific



models (zero, one, two, and three random variables) are discussed."—C. H. Ammons.

2899. Gaito, John. (Wilkes Coll.) **Scale classification and statistics.** *Psychol. Rev.*, 1960, 67, 277-278.—The author argues that "statements concerning scale properties and statistical procedures should be guides and that context, mathematical assumptions of statistical procedures, and the results of research concerned with failure to satisfy assumptions should be the ultimate determiners of the choice of statistical techniques."—C. T. Morgan.

2900. Ghiselli, Edwin E. (U. California) **Differentiation of tests in terms of the accuracy with which they predict for a given individual.** *Educ. psychol. Measmt.*, 1960, 20, 675-684.—3 investigations are reviewed in which a differential predictability variable was derived. The method involves determining which of 2 predictors is the better predictor through the computation of the degree of relationship between scores on the differential predictability variable and the values  $D_2 - D_1$ . This permits differentiating individuals as to which of a pair of tests provides a better prediction of criterion variables.—W. Coleman.

2901. Gibson, W. A. (USA TAGO) **Orthogonal from oblique transformation.** *Educ. psychol. Measmt.*, 1960, 20, 713-721.—A simple successive approximations method for orthogonalizing an oblique transformation is presented. Application to several empirical problems has required no more than 3 iterations to achieve an orthogonal solution.—W. Coleman.

2902. Graybill, Franklin A., & Morrison, Robert D. **Sample size for a specified width confidence interval on the variance of a normal distribution.** *Biometrics*, 1960 (Dec), 16, 636-641.—With an estimate of the population variance available from previous data, the table provided can be used to estimate the sample size required for a confidence interval of a given width that will contain the population variance with a specified probability.—R. L. McCornack.

2903. Hamaker, H. C. **Applied statistics, an important phase in the development of experimental science.** *Philips tech. Rev.*, 1960-61, 22, 105-112.—The broad lines of development of statistical methods as applied to research in general are traced and fundamental changes in the principles of experimental science are pointed out. The role of the applied statistician is considered important. He needs experience and intuition to be of the most service to experimental science.—M. C. Benton.

2904. Harman, Harry H. **Modern factor analysis.** Chicago, Ill.: Univ. of Chicago Press, 1960. xvi, 469 p. \$10.00.—The book is organized in 5 major parts covering the history of factor analysis, direct solutions, derived solutions, some special topics, such as, statistical tests of hypotheses in factor analysis, and measurement of factors and problem material. Detailed consideration of such issues as simple structure and communalities is presented. Recent analytical methods of rotation to a desired final solution, the use of high speed electronic computers in factor analysis and presentation of statistical tests of hypotheses in factor analysis are presented in detail. A series of problems and exercises, including an-

swers and a very extensive bibliography on the theory and methods of factor analysis are also included.—Eric F. Gardner.

2905. Harter, H. Leon. **Critical values for Duncan's new multiple range test.** *Biometrics*, 1960, 16, 671-685.—Previously published tables (see 30: 107) are here both corrected and extended. Critical values, correct to 4 significant figures, are given for significance levels of .10, .05, .01, .005 and .001; in each case with the number of means  $m = 2(1)20(2)40(10)100$ , and degrees of freedom  $v = 1(1)20, 24, 30, 40, 60, 120$  and infinity.—R. L. McCornack.

2906. Iker, Howard P., & Perry, Norman C. (U. Rochester) **A further note concerning the reliability of the point biserial correlation.** *Educ. psychol. Measmt.*, 1960, 20, 505-507.—Through the use of the IBM 650, more accurate values for  $Q$  were obtained for use in a derived formula for estimating the reliability of the point biserial correlation,  $Q = (1 - p^2 \sqrt{1 - p^2 (\frac{3}{4} - \frac{1}{4} pq)})$ . The complete table of values is available from the American Documentation Institute or from the senior author.—W. Coleman.

2907. Jaspens, Nathan. (New York U.) **IBM 407 procedure for determining score ranges.** *Educ. psychol. Measmt.*, 1960, 20, 603-606.—A method for determining the highest and lowest scores of each of several tests on one pass through the IBM 407 is described. "An IBM 407 equipped with 20 pilot selectors, and with minimum counter capacity, can determine the ranges of nine tests on one run."—W. Coleman.

2908. Jaspens, Nathan. (New York U.) **IBM 650 program for computing large correlation matrices.** *Educ. psychol. Measmt.*, 1960, 20, 595-602.—"This paper describes a new IBM 650 program for producing correlation matrices involving several hundred variables. The limit of this program is 900 three-digit variables for 10,000 cases." The principles developed in this program can be applied with larger computers permitting much larger correlation matrices.—W. Coleman.

2909. Jaspens, Nathan. (New York U.) **IBM 650 program for reading double punch and blank column cards.** *Educ. psychol. Measmt.*, 1960, 20, 607-610.—The wiring required to read on one pass up to 50 items double punched into 25 columns is shown for a regular IBM card or for the IBM 9902 Electronic Test Scoring Punch.—W. Coleman.

2910. Kenney, P. B., & Coltheart, F. M. M. **The effect of sampling restriction on factor patterns.** *Aust. J. Psychol.*, 1960, 12, 58-69.—"Doubt is cast on the arguments of Godfrey Thomson and L. L. Thurstone concerning the effects of sampling restriction on factor patterns, and some anomalies are pointed to in Pearson's original theorems concerning variance restriction."—P. E. Lichtenstein.

2911. Kristof, W., & Vukovich, A. (U. Marburg, Germany) **Die statistische Beurteilung von Unterschieden zwischen korrelierenden Stichproben bei Berücksichtigung mehrerer Merkmale.** [The statistical judgment of differences between correlating samples, with special reference to several criteria.] *Psychol. Beiz.*, 1960, 4, 71-75.—A multivariate significance test for mean value differences in correlating samples is described. The method con-



sists of a generalization of the t-test for pair differences. A fictitious example illustrates the application. (English & French summaries)—*H. J. Priester*.

2912. McQuitty, Louis L. (Michigan State U.) **Comprehensive hierarchical analysis.** *Educ. psychol. Measmt.*, 1960, 20, 805-816.—"Comprehensive hierarchical analysis is a rapid and efficient method for classifying all combinations of persons into an hierarchical system which reflects the number of test items on which the members of every category agree in their answers. A contracted version isolates only the more type-like combinations and classifies them into types." A matrix version and a rank-order version are described with examples used.—*W. Coleman*.

2913. National Education Association, Research Division. **Small-sample techniques.** *Nat. educ. res. Bull.*, 1960, 38(4), 99-104.—A formula is reported by means of which the size of a sample is determined when the level of confidence and degree of accuracy are established. The use of this formula is illustrated in the case of drawing a sample of male teachers who are to respond to a questionnaire. A 2-stage sampling process was used. First, a sample of school districts was selected; and second, a sample of teachers was drawn from within these districts. The validity of the sample and the accuracy of the opinion data yielded by the questionnaire were studied and judged to be acceptable for the purposes of the investigation.—*J. S. Ahmann*.

2914. Nichols, Robert C. (Purdue U.) **A method for recording, scoring and correlating Q-sort data on IBM cards.** *Educ. psychol. Measmt.*, 1960, 20, 591-593.—"A method is described by which items for Q-sorts can be printed on IBM cards and the placement of cards easily recorded after sorting by a subject. Machine methods for obtaining correlations between sorts and scores for subsets of items are also described."—*W. Coleman*.

2915. Nunnally, Jum. (U. Illinois) **The place of statistics in psychology.** *Educ. psychol. Measmt.*, 1960, 20, 641-650.—The use of hypothesis-testing models is criticized and particularly the null-hypothesis model. Criticism is also directed at "fixed-increment" hypothesis testing, the small N fallacy, the sampling fallacy, and the crucial experiment. The author recommends that hypotheses should be tested by a process of estimation illustrating with the use of analysis of variance. Confidence intervals are used to provide an indication of the level of confidence to be placed in an estimate. For comparison of mean differences Epsilon is recommended for providing an unbiased estimate of the correlation ratio.—*W. Coleman*.

2916. Robson, D. S., & Atkinson, G. F. (Cornell U.) **Individual degrees of freedom for testing homogeneity of regression coefficients in a one-way analysis of covariance.** *Biometrics*, 1960, 16, 593-605.—A test procedure is described and illustrated which amounts to partitioning the among regression coefficients F-test into individual tests designed to have greater power against some restricted classes of heterogeneous but still linear alternatives to the hypothesis of parallel linear regressions.—*R. L. McCornack*.

2917. Sawrey, William L., Keller, Leo, & Conger, John J. (U. Colorado School Medicine) **An objective method of grouping profiles by distance functions and its relation to factor analysis.** *Educ. psychol. Measmt.*, 1960, 20, 651-673.—An objective method of grouping profiles based on distance functions is presented and illustrated with profiles obtained from an art preference test. A rationale for using  $d^2$  as a measure of profiles is given. The author's maintain "that the method of profile analysis presented in this article may prove to be a technique of interest and value, particularly since it preserves not only profile shape, but also elevation and scatter."—*W. Coleman*.

2918. Scott, William A. (U. Colorado) **Measures of test homogeneity.** *Educ. psychol. Measmt.*, 1960, 20, 751-757.—"Test homogeneity can be measured in at least 3 different ways—by inter-item correlation, by item-test correlation, and by the total test variance. The last two types of measures can be reduced mathematically to the first." Loevinger has provided indices to measure inter-item homogeneity and total test homogeneity. Scott adds in this paper a third index, P.B.R., "which is a ratio between the point-biserial correlation and the maximum value possible, given the obtained variances of both the dichotomous and the continuous variables."—*W. Coleman*.

2919. Seidenberg, Robert. (State U. New York) **Interpersonal determinants of reality-testing capacity.** *Arch. gen. Psychiat.*, 1960, 3, 368-372.—The cases of 2 married women are reported. The husband of a 26-year-old teacher projected his own insecurity on her, overprotected her and ruled her life to the point where she felt "she was losing her mind" and incapable of handling her own life. Through tranquilizers the family physician whom the husband had called and who remained in contact with the husband had increased her fears. The 44-year-old wife of a physician developed the same fears after her husband had criticized her activities and interests and insisted in her following entirely his ambitions. When she did not cooperate to his satisfaction, he sent her to a psychiatrist from whom he obtained information about her. The author refused to see the woman upon the husband's request, but treated her after she had contacted him. He refused any contact with the husband. The presence of unconscious conflicts in both patients is not denied.—*L. W. Brandt*.

2920. Sen, Tapas Kumar. (Calcutta, India) **An empirical study of different reliability formulae.** *Indian J. Psychol.*, 1958, 33, 49-54.—Formulas and brief explanations are given for the following measures of reliability: Spearman-Brown, Kuder-Richardson Formula 20, Kuder-Richardson Formula 21, Kuder-Richardson Formula 14, Hoyt's method, and Rulon's formula.—*C. T. Morgan*.

2921. Shumway, Robert, & Gurland, John. (Iowa State U.) **Fitting the Poisson binomial distribution.** *Biometrics*, 1960, 16, 522-533.—A procedure is described for getting maximum likelihood estimates of the parameters and computing probabilities. Tables to facilitate computations are given and the entire procedure illustrated. Discussed is case where the zero class is missing.—*R. L. McCornack*.

2922. Thomas, Macklin. (Chicago Public Schools, Ill.) **A method of obtaining normalized standard scores from arithmetic probability paper.** *Educ. psychol. Measmt.*, 1960, 20, 801-803.—A convenient method of obtaining normalized standard scores by the use of arithmetic probability paper is described and illustrated.—*W. Coleman.*

2923. Wadsworth, George P., & Bryan, Joseph G. **Introduction to probability and random variables.** New York: McGraw-Hill, 1960. 292 p. \$8.75.—Textbook for a short undergraduate course with a calculus prerequisite. The 1st half covers: preliminary mathematics, probability concepts, discrete and continuous random variables, and joint distributions. The 2nd half covers: derived distributions, mathematical expectation, and some of the more elementary statistical uses of probability. Abbreviated tables of: the binomial, Gamma, Chi-square, *t*, *F*, and Normal distributions are included.—*D. A. Grant.*

2924. Wendt, H. W. (U. Mainz, Germany) **Entwurf von photometrischen Analogverfahren fuer Zwecke der psychologischen Statistik.** [Outline of photometric analog devices for the purpose of psychological statistics.] *Psychol. Beil.*, 1960, 4, 160-178.—Possibilities for facilitating the computation of standard parametric measures, such as variance, correlation, and similar statistics are studied. Based on experience with optical and electronic devices, several analogy type solutions for such statistics are suggested and some specifications given. The basic unit of the system consists of a light source, diffusion screens, an integrating and measuring device and an optical filter whose transmission gradient corresponds to the computer function desired. Technical problems are discussed, concerning, respectively, automatization and programing of the punching process, multiple ties of data, the generating of filters by photography of suitable surfaces, estimated accuracy, and economy of the analog devices. (31 ref. English & French summaries)—*H. J. Priester.*

#### GENERAL BOOKS & REFERENCE WORKS

2925. Abt, L. E., & Riess, B. F. (Eds.) **Progress in clinical psychology. Vol. IV.** New York: Grune & Stratton, 1960. vii, 181 p. \$6.75.—This review volume contains the following chapters: Gregory Razran, "The Observable Unconscious in Current Soviet Psychophysiology: Survey and Interpretation of Experiments in Interceptive Conditioning"; R. S. Lazarus and W. F. Riess, "Clinical Psychology and the Research Problems of Stress and Adaptation"; H. J. Eysenck, "A Rational System of Diagnosis and Therapy in Mental Illness"; M. V. Kline, "Hypnosis and Clinical Psychology"; C. R. Rogers, "Significant Trends in the Client-Centered Orientation"; H. R. Blank, "Contributions of Freudian Psychoanalysis"; O. H. Mowrer, "Footnotes to a Theory of Psychopathology"; Mary A. White, "School Psychology"; R. H. Gundlach, "Group Psychotherapy: New Clinical and Experimental Approaches"; and H. Slochower, "Psychoanalysis and Literature."—*C. T. Morgan.*

2926. Hall, Calvin S. (U. Miami) **Psychology: An introductory textbook.** Cleveland, O.: Allen, 1960. xiv, 640 p.—The 14 chapters, dealing with the traditional topics of introductory psychology, attempt

"to stimulate a discussion of ideas about man and the kind of operations psychologists perform in trying to verify their ideas about man." The author has "tried to say much about a representative group of subjects rather than say something . . . about a wide variety of topics . . . in the hope that a broader discussion of fewer things will result in better understanding." In addition to extensive quotations, each chapter includes suggested further readings in standard books and in paperbound books.—*R. S. Harper.*

2927. Hehlmann, Wilhelm. **Wörterbuch der Psychologie.** [Dictionary of psychology.] Stuttgart, Germany: Alfred Kröner, 1959. viii, 575 p. DM 15.00.—The entries consist of terms and names of persons. Terms of non-German origin are followed by an indication of the language of origin, sometimes with a literal translation. Entries are followed by bibliographical references giving author, title, date, and number of latest edition up to 1959 inclusive. (32 fig., historical table, list of handbooks, textbooks, histories of psychology, reference works, and periodicals)—*L. W. Brandt.*

2928. Laird, D. A., & Laird, Eleanor C. **Techniques for efficient remembering.** New York: McGraw-Hill, 1960. x, 187 p. \$3.95.—A semipopular book of 19 chapters organized around 4 general rules: (a) "the techniques of trying to remember," (b) "the techniques of reacting actively" (c) "strategies for keeping memories fresh" and (d) "center your memories around meanings."—*C. T. Morgan.*

2929. Spence, Kenneth W. (State U. Iowa) **Behavior theory and learning.** Englewood Cliffs, N.J.: Prentice-Hall, 1960. xii, 403 p. \$6.75.—A collection of 22 of the author's theoretical and experimental papers. 20 of the papers have been previously published as individual articles while 2, "The Roles of Reinforcement and Non-Reinforcement in Simple Learning" and "Conceptual Models of Spatial and Non-Spatial Selective Learning," have not previously appeared in print. Part I, entitled "Methodological Basis of Psychology," contains 5 papers dealing with the philosophical and methodological problems of psychology. The 10 papers comprising Part II, "Behavior Theory," are concerned with the author's basic theoretical structure of learning phenomena and extensions of this theory to more complex types of behavior. Part III, "Discrimination Learning," contains 7 papers dealing with discrimination learning.—*L. E. Ross.*

2930. Sundberg, Norman D. (U. Oregon) **Basic readings in psychology.** *Amer. Psychologist*, 1960, 15, 343-345.—"Perhaps one of the best criteria of a book's present significance is whether or not it is deemed important enough to be chosen to appear on the reading lists for graduate students preparing for their doctoral examinations. With this criterion in mind, letters were sent to all American and Canadian psychology departments granting doctor's degrees in 1953-54 and again, five years later, in 1958-59." Listed are books recommended by  $\frac{1}{2}$  or more departments in 1958-59, books recommended by  $\frac{1}{4}$ - $\frac{1}{2}$  the departments in 1958-59, and additional books recommended by  $\frac{1}{2}$  the departments in 1953-54 but not listed by  $\frac{1}{4}$  in 1958-59. "The basic readings in psychology today may then be represented by the 30 books recommended by at least a third of the psychology departments."—*S. J. Lachman.*

2931. Swanson, Don R. (Thompson Ramo Wool-dridge, Inc., Canoga Park, Calif.) **Searching natural language text by computer.** *Science*, 1960, 132, 1099-1104.—"It is through the medium of libraries that knowledge is preserved for the future, yet posterity stands to benefit little unless such preserves are both accessible and digestible. . . . A fundamental approach to automatic indexing and retrieval of library-stored information through investigating machine search of natural language text is described . . . and the results of preliminary experimental studies based on that approach are presented. . . . Text search by computer was . . . significantly better than a conventional, nonmechanized subject-index method."—S. J. Lachman.

2932. Westbrook, J. H. (General Electric Research Lab., Schenectady, N.Y.) **Identifying significant research.** *Science*, 1960, 132, 1229-1234.—"How . . . does one distinguish, on an objective basis, the brilliant research paper from the marginally acceptable, the trivial from the significant piece of work?" The "repeated citation of a particular source by independent research workers whose own contributions have met some standard of publishability is very probably indicative of the worth of the scientific output of that source. In principle, it is believed that with this parameter—the number of literature citations—it should be possible to identify laboratories, individuals or even specific papers of unusual significance." 2 populations of references were selected and analyses presented in 9 tables and 3 figures. "Analysis of literature citations is a useful measure of the significance of research."—S. J. Lachman.

(See also Abstracts 3993, 4147)

#### ORGANIZATIONS

2933. Educational Testing Service. **Annual report: 1959-1960.** Princeton, N.J.: ETS, 1960. 107 p.

2934. Sewny, K. W. (Ed.) **Directory of social and health agencies of New York City: 1960-61.** New York: Columbia Univer. Press, 1960. xii, 689 p. \$8.50.—Prepared under the direction of the Community Council of Greater New York this directory provides basic information on welfare and health agencies serving New York City, listed alphabetically and classified by function.—L. S. Kogan.

2935. Wallin, J. E. W. (311 Highland Ave., Lyndalia, Wilmington, Del.) **History of the struggles within the American Psychological Association to attain membership requirements, test standardization, certification of psychological practitioners, and professionalization.** *J. gen. Psychol.*, 1960, 63, 287-308.—A brief history of the origin of the American Psychological Association, especially its transformation from a small learned society to a large scientific professional organization with rigid eligibility requirements and a vigorous program of certification of psychological practitioners and accreditation of training institutions; the story of its professionalization.—Author abstract.

2936. Young, Marguerite L., & Odbert, Henry S. (National Science Found.) **Government support of psychological research: Fiscal year 1959.** *Amer. Psychologist*, 1960, 15, 661-664.—"The report

presents information on the amount and sources of funds for the support of psychological research and reflects the relative emphasis being placed on specific areas of psychology. . . . In the fiscal year 1959 (ending June 30, 1959) there was a substantial increase over the preceding year in federal support of psychological research. Approximately \$31,300,000 was obligated by some 12 departments and subdivisions of the federal government for the conduct of research in psychology and closely related areas." 4 tables indicating annual rate of support of extramural research in psychology and related fields are provided; a 5th table indicates obligations by scientific fields for fiscal years 1958, 1959, and 1960.—S. J. Lachman.

#### PROFESSIONAL ASPECTS OF PSYCHOLOGY

2937. American Psychological Association, Education and Training Board. **Doctoral training programs in clinical psychology and in counseling psychology.** *Amer. Psychologist*, 1960, 15, 361-362.—S. J. Lachman.

2938. Brewer, J. E. (Wichita Guidance Center) **Administrative issues for the psychologist as director of a community guidance center.** *J. clin. Psychol.*, 1959, 15, 249-251.—F. N. Arnhoff.

2939. Brophy, Alfred L., & Durfee, Richard A. (Richmond Professional Inst., Va.) **Mail-order training in psychotherapy.** *Amer. Psychologist*, 1960, 15, 356-360.—Unaccredited schools purport to offer training in a variety of psychological and metapsychological methods of alleviating emotional problems and fostering self-realization. "Many of these schools offer correspondence courses and grant certificates, diplomas, and degrees, including doctor's degrees." Requested literature of 24 such institutions was analyzed. Degrees and diplomas offered are summarized in a table and include Doctor of Philosophy, of Psychology, of Metaphysics, of Science, and of Psychotherapy. "One school . . . grants a PhD after as little as 18-months study with no previous college education. . . . Corrective action has been made difficult because of the geographical scattering of the schools and the consequently minor problem that they represent to most individual states."—S. J. Lachman.

2940. Coffield, Kenneth E., & Engle, T. L. (Muskingum Coll.) **High school psychology: A history and some observations.** *Amer. Psychologist*, 1960, 15, 350-352.—Psychology has been in the secondary curriculum by title since at least 1895. 390 questionnaires were sent to superintendents and principals in 46 states. "Returns were received from 39 states which represented 64% of the original mailing." A table indicating dates for the introduction of psychology into the curriculum ranged from 1895 to 1959 discloses "a gradual increase in the number of schools introducing the course up to the modal year 1948." Once in the curriculum it tends to remain. Schools indicate 3 major reasons why psychology is not being offered and why others drop it: (a) an already crowded curriculum; (b) lack of trained teachers; (c) since "the trend of today is toward a more intense development of science, psychology cannot be offered."—S. J. Lachman.

2941. Cottle, William S. **Doctoral theses in counseling and student personnel work.** *J. coun-*

*sel. Psychol.*, 1959, 6, 230-233.—A listing of doctoral theses completed in a period from June, 1957 to June, 1958 is presented, as prepared for the Division of Counseling Psychology of the American Psychological Association.—M. M. Reece.

2942. Engle, T. L. (Indiana U.) **Preparation for teaching psychology in high school.** *Amer. Psychologist*, 1960, 15, 353-355.—Of 150 randomly selected Division 2 psychologists, 100 responded to a questionnaire. They "think of high school psychology as belonging somewhere between biological science and social science. . . . They favor more training in psychology and less in related areas than is the practice at present" for high school teachers of psychology. "The amount of preparation recommended, especially that indicated as desirable, is so high that it is not likely many high school teachers of psychology can be induced to secure this amount of training." Major sections are: Science or Social Study? General Suggestions, Training in Psychology, Related Training, Conclusions. (3 tables)—S. J. Lachman.

2943. Garfield, Sol L. (U. Nebraska Coll. Medicine) **Research survey: State mental health programs.** *Amer. Psychologist*, 1960, 15, 319-320.—"In preparation for the 1959 meeting of chief psychologists in state mental health programs a questionnaire on research was prepared and sent to 77 psychologists who were either functioning as chief psychologists in state programs" or in similar positions. Replies were received from 39 individuals, representing 30 states. "Evaluation of treatment was listed most frequently as an area in need of research." At least 45 different types of ongoing research projects were listed. "Three factors were emphasized as the main obstacles to research in the state programs: lack of personnel . . . lack of funds . . . emphasis on service, with subsequent lack of time for research." Psychologists were "seen as the individuals most involved in mental health research in state programs."—S. J. Lachman.

2944. Granger, Stephen G. (VA Hosp., St. Cloud, Minn.) **Psychologists' prestige rankings of 20 psychological occupations.** *J. counsel. Psychol.*, 1959, 6, 183-188.—"This paper describes in part the results of a survey in which a random sample and 11 special interest groups in the APA were asked to rank 20 job titles in psychology according to occupational prestige." The rankings show the psychology professor in a large university as having the highest prestige and the employment interviewer, the lowest. The counseling psychologist was ranked 8th.—M. M. Reece.

2945. Hardee, Melvane Draheim. (Florida State U.) **The sad case of the bigger lost sheep.** *Personnel guid. J.*, 1959, 38, 202-206.—Self-insights are too often overlooked in graduate education.—S. Kauruck.

2946. Hobbs, N. (George Peabody Coll. Teachers) **The psychologist as administrator.** *J. clin. Psychol.*, 1959, 15, 237-240.—Describes 9 critical requirements for administrative roles in psychology.—F. N. Arnhoff.

2947. Hodges, Walter L. (George Peabody Coll. Teachers) **State certification of school psycholo-**

**gists.** *Amer. Psychologist*, 1960, 15, 346-349.—"Nine questions . . . were answered by the responsible departments of all 50 states and the District of Columbia." 23 states and the District of Columbia are reported as having certification requirements. General requirements stipulated by states with explicit certification standards are specified in a table. The "majority of states are certifying psychological personnel mainly to assist in the placement of children for special education. . . . There are encouraging signs that certification requirements are gradually being improved."—S. J. Lachman.

2948. Holtzman, Wayne H. (U. Texas) **Some problems of defining ethical behavior.** *Amer. Psychologist*, 1960, 15, 247-250.—Several issues are raised including: the definition of professional versus commercial standards, restriction on the scope of the professional relationship, the maintenance of test security, the question of to whom to release test scores, test publication and advertising practices, and the problem of client welfare. "Unless we clean house by a tough minded tightening of standards and a more effective campaign against questionable practices engaged in by a few psychologists, all psychologists will suffer by implication in the eyes of the general public." 3 cornerstones of ethical behavior are: high standards of personal competence, painstaking avoidance of misrepresentations, and primary concern for the integrity and welfare of the persons with whom the psychologist works.—S. J. Lachman.

2949. Horowitz, M. J. (Western Reserve U.) **The administrative role of a chief psychologist in a medical setting.** *J. clin. Psychol.*, 1959, 15, 252-254.—F. N. Arnhoff.

2950. Humber, W. J. (Humber, Mundie & McLary) **Psychologists in administration: Introduction.** *J. clin. Psychol.*, 1959, 15, 235-236.—Introductory paper of a symposium devoted to the problems, opportunities and preparation of psychologists in various kinds of administrative positions.—F. N. Arnhoff.

2951. McCullough, M. W. (Ohio Division Mental Hygiene) **Personnel problems of psychologists in mental health administration.** *J. clin. Psychol.*, 1959, 15, 244-248.—F. N. Arnhoff.

2952. McKeachie, W. J. **Changes in scores on the Northwestern Misconceptions Test in six elementary psychology courses.** *J. educ. Psychol.*, 1960, 51, 240-244.—This study reports the results from the administration of the Northwestern Misconception Test to elementary psychology classes at Carnegie Institute, Colgate, Michigan, Northwestern, Penn State, and Trinity. The test was given at the beginning and end of the course. In the 6 different institutions, the students showed some gain in total test scores. The gains and losses varied from institution to institution. Many of the items upon which students showed little improvement were regarded by faculty members as unimportant. Gains on items rated important were also small. It is pointed out that we need to investigate more carefully what types of teaching or content are most effective in producing gains in this area.—W. E. Hall.

2953. McKeachie, W. J., & Teevan, R. C. (U. Michigan) **An honors program in psychology.** *J. gen. Psychol.*, 1960, 63, 179-183.—The University of



Michigan Department of Psychology started the honors program described in this article in 1950. Among the outcomes indicating its success is a 100% increase in the rate of production of students going on to the doctorate in psychology. Other evidence also supports the role of the 4-year program in stimulating interest in psychology.—*Author abstract.*

2954. McKee, J. M. (Alabama State Dept. Health) **Administrative opportunities for psychologists in state mental health programs.** *J. clin. Psychol.*, 1959, 15, 241-244.—". . . good administrators are made not born. This supposition implies a need for specific training in skill development. . . . State mental health programs will find it necessary to prepare psychologists for administrative functions through careful selection, in-service training and consultation to program administrators."—F. N. Arnhoff.

2955. McKinney, Fred. (U. Missouri) **Teaching values and psychology.** *Amer. Psychologist*, 1960, 15, 339-342.—"Why do colleges fall short in stimulating students to think in terms of their life values when academicians have so clearly stated such goals for them?" Psychologists in teaching "are concerned verbally with the growth of values in their students; in contrast to this relative clarity there seem to be few specific testable hypotheses concerning the stimulation of the growth of values in students or widespread empirical students on the nature of mature values in our culture. These areas need the same attention from our profession as is given to other current problems such as defense, health, and commerce."—S. J. Lachman.

2956. Mahler, Vera. **Hapsikhologia bizmanenu.** [Psychology nowadays.] *Urim*, 1959-60, 17, 333-337, 509-516.—"I should like to warn of exaggerated applying of psychology, as it is customary today by the general public and educators." The dangers of widespread application of psychology are connected with incorrect understanding of psychological concepts (pseudopsychology), with "neurotic" acceptance of psychology by the general public as a magic help, with uncritical administration of tests and other measurements, and with widespread belief in use of psychotherapy.—H. Ormian.

2957. Meltzer, H. (Orchard Paper Co., St. Louis, Mo.) **Industrial psychology in Psychological Abstracts: 1927-1959.** *J. appl. Psychol.*, 1960, 44, 111-114.—By comparing the ratio of abstracts appearing in Psychological Abstracts to membership in American Psychological Association Division 14, the productivity of industrial psychologists over the years 1927-58 was judged not to be increasing as is generally assumed. "Get the academic people to write less; get the people in industrial settings . . . to write more; get the consulting organization staffs to be interested in research." Influence from psychologists in industry, consulting organizations, and professors of industrial psychology in universities is needed for this to occur.—J. W. Russell.

2958. Molnar, Julius V. (Portsmouth, O.) **Psychotherapies by nonmedical therapists.** *Arch. gen. Psychiat.*, 1960, 3, 590-592.—In reply to a paper representing the opposite view by Dr. Szasz (see 34: 5104) the author insists that psychologists and members of other nonmedical professions should

practice psychotherapy only under medical supervision.—L. W. Brandt.

2959. Paterson, Donald G., & Lofquist, Lloyd H. (U. Minnesota) **A note on the training of clinical and counseling psychologists.** *Amer. Psychologist*, 1960, 15, 365-366.—"In June of 1958, letters were sent to the department chairmen of the 24 institutions approved by the APA Education and Training Board to train PhD psychologists in both the clinical and counseling specialties. . . . One-third of the 24 institutions are known to differentiate definitely in course requirements between the two specialties, while only one-eighth are known to differentiate definitely in the preliminary examinations used for the two specialties. . . . Only three of the institutions definitely differentiate between the specialties in terms of both course requirements and preliminary examinations. . . . it seems obvious that little differentiation is being made between the two specialties in our major training institutions even though these institutions are approved to train for each of the specialties."—S. J. Lachman.

2960. Platz, Arthur, & Blakelock, Edwin. (U. Michigan) **Productivity of American psychologists: Quantity versus quality.** *Amer. Psychologist*, 1960, 15, 310-312.—"The answer to the question as to whether high producers also produce higher quality work seems to depend upon the severity of the criterion used to measure quality. If a severe criterion is used, the difference tends to favor the low producers. If less severe criteria are used, the high producers are favored. Although these results make it appear doubtful that high producers do better research than psychologists in general, they still make a greater contribution to the field by virtue of publishing a greater absolute number of high quality articles."—S. J. Lachman.

2961. Sawyer, Jack. (U. Chicago) **The industrial psychologist: Education and employment.** *Amer. Psychologist*, 1960, 15, 670-673.—This study is based upon the 708 (out of 716) Division 14 members and fellows for whom complete biographical entries are contained in the 1959 APA Directory. This constitutes about 4% of the total APA membership. Major sections are: Sample, Education, Employment (Changes in initial employment, Turnover, Status and present employment). "Over half of the members of Division 14 received their highest degree in 1949 or later." (4 tables)—S. J. Lachman.

2962. Wiskoff, Martin. (U. Maryland) **Ethical standards and divided loyalties.** *Amer. Psychologist*, 1960, 15, 656-660.—A final questionnaire of 22 incidents was constructed. "Each incident was so designed as to present a conflict between the best interests of the client and society, with the psychologist having made a decision in each whether to reveal to a third party any part or all of the information revealed to him by his client." Responses were in terms of 4-point client-society loyalty scale. 73.6% usable returns (of 501 questionnaires to Associates and Fellows in Divisions 12, 14, and 17) were analyzed. Applied psychologists "differ in their divided loyalty perceptions according to certain reference group memberships. . . . While there were individuals at the extremes of both tails of the distribution, some indicating retention, some release of information, the bulk of psychologists adopted some compromise posi-



tion. . . There should not be any dichotomous viewing of divided loyalty situations as right or wrong, nor even judgments on a continuum of rightness or wrongness."—S. J. Lachman.

#### PSYCHOLOGY ABROAD

2963. Bagchi, Amalendu. (Jalpaiguri, India) **The Indian approach to psychology.** *Indian J. Psychol.*, 1956, 31, 159-178.—A survey of the ideas of various Indian psychologists.—C. T. Morgan.

2964. David, Henry P. (Chr.) **Symposium on reciprocal influences in international psychology.** *Amer. Psychologist*, 1960, 15, 313-315.—"The question of reciprocal influences was considered in terms of the number and distribution of psychologists throughout the world. . . It was quickly conceded that, at present, influences in international psychology are not reciprocal and, perhaps, cannot be for some time to come. This problem is complicated not only by the sheer preponderance and resources of American psychology, but also by a general tendency to ignore attainments abroad, unless conveniently published in readily available English-language journals." Psychology "is an international science, to which psychologists everywhere can and do contribute. . . We share a common enterprise with common goals and aspirations."—S. J. Lachman.

2965. Department of Labour and National Service. **Current research in the field of industrial relations.** *Personnel pract. Bull.*, 1960, 16(4), 41-44.—This is a summary, by university or college and subject, of research being done in industrial relations in Australia.—J. L. Walker.

2966. Fontaine, C. (Ministry Social Affairs, Tunis, Tunisia) **Réflexions méthodologiques sur la pratique des tests en Afrique du Nord.** [Methodological considerations on the application of tests in North Africa.] *Rev. Psychol. appl.*, 1959, 9, 171-175.—Experience in giving 12,000 psychological examinations in Tunisia indicates that this is a favorable setting for the use of test procedures without previous cultural adaptations. The necessary translations and adaptations can be made in terms of the characteristics and education of each group.—W. W. Wattenberg.

2967. Hirota, Kimiyoshi. (Kansai U., Japan) **Development of social psychology in Japan.** *Psychologia*, 1959, 2, 216-228.—Main headings: "General Survey of the Pre-War Social Psychology of Japan"; "Great Leap Forward of Social Psychology in Post-War Years"; "Activities of Psychological Associations"; "Trends of Research"; "Post-War Trends Appearing in Various Publications"; "Activities of Japanese Social Psychologists." (92 ref.)—C. T. Morgan.

2968. Kirihaara, Shigemi H. (Inst. Science of Labor, Tokyo, Japan) **Development of industrial psychology in Japan.** *Psychologia*, 1959, 2, 206-215.—Present-day industrial psychology in Japan is described under the following topics: human ability and qualification; working conditions and fatigue; accidents and safety problems; attitude, morale and human relations; job studies and personnel rating; vocational guidance and occupational psychology; labor relations and workers psychology; and con-

sumers psychology and marketing research. (25 ref.)—C. T. Morgan.

2969. McGinnies, Elliott. (U. Maryland) **Psychology in Japan: 1960.** *Amer. Psychologist*, 1960, 15, 556-562.—"It is hoped that American psychologists interested in foreign developments in their field will achieve a better understanding of Japanese research from this review and will be more aware of their own influence on the Japanese psychological scene." Major sections are: Psychological Publications, Foreign Influences, Research Emphases in Japan, Current Research Effects (Visual Perception, Learning, Comparative and Physiological, Personality and Psychodiagnostics, Social Psychology, Industrial Psychology), Educational Practices, Professional Activity. "Japanese psychology is in active ferment and . . . Japanese psychologists aspire to a position of increasing international prominence."—S. J. Lachman.

2970. Misumi, Jyugi. (Kyushu U., Japan) **Experimental studies on "group dynamics" in Japan.** *Psychologia*, 1959, 2, 229-235.—Since the war, education and industry have been emphasizing applied social psychology and "group dynamics." (19 ref.)—C. T. Morgan.

2971. Pan Shuh. (Academia Sinica, Peking, China) **China's recent research work on psychology.** *Psychologia*, 1959, 2, 193-201.—After the "liberation," Chinese psychological research was following the lines of Soviet psychology and Pavlovian theory. In 1957, however, a nationwide rectification movement required that "psychology serve the practical work of Socialistic Reconstruction . . . [and] speed up the construction of dialectic Materialist Psychology through solving practical problems." Work in the new period is mainly in educational psychology, industrial psychology, and medical psychology. A complete table of contents is given of *Acta Psychologica Sinica* (Peking) since its inception in 1956.—C. T. Morgan.

2972. Sinha, A. K. P. (Patna, India) **Planning psychological research in India.** *Indian J. Psychol.*, 1958, 33, 1-20.—Criteria for sound psychological research are outlined. Some of the more important areas needing research are: psychological tests, guidance and personnel work, mental health, human engineering, problems of the armed services, and international conferences. A plea is made for large-scale group research along multidisciplinary and cross-national lines, for the formation of a Psychological Research Development Board to plan programs of research, and for the early establishment of a National Institute of Psychology financed by the government of India. (25 ref.)—C. T. Morgan.

2973. Su Hsiang-Yu. (National Taiwan U. Taipei) **Psychological activities in Taiwan.** *Psychologia*, 1959, 2, 202-205.—The department of psychology numbers 10 staff members (5 full professors), has greatly increased its library and laboratory instruments, and has graduated seven classes. Their 50 graduation theses are listed by title. Research activities are briefly summarized. A table of contents for *Acta Psychologica Taiwanica* since its inception in 1958 is given.—C. T. Morgan.

2974. Tachibana, Kakusho. (Osaka U.) **Trends in gerontology in Japan.** *Psychologia*, 1959, 2, 150-

156.—"... an attempt to describe ... mainly along the line of research in psychological and social scientific field, with only brief information on medical research." An introduction concerns Matsumoto's work which is followed by a broad outline of current activity including detailed enumerations of lectures and writings.—D. Bryan.

2975. Yoda, Arata, & Hidano, Tadashi. (U. Tokyo, Japan) **Development of educational psychology in Japan.** *Psychologia*, 1959, 2, 137-149.—A general report of studies from historical beginnings to present, including postwar trends and test development. Historical survey cites child study movement, its role and theoretical foundation. Several main works today are summarized. (67 ref.)—D. Bryan.

(See also Abstracts 3321, 3322, 3335, 3357, 3359, 3371, 3388, 3389, 3391, 3397, 3398, 3399, 3400, 3402, 3404, 3421, 3424, 3451, 3452, 3456, 3462, 3463, 3464, 3465, 3473, 3496, 3502, 3504, 3517, 3527, 3534, 3545, 3641, 3948, 3974)

## HUMAN EXPERIMENTAL PSYCHOLOGY

2976. Andreas, Burton G. (U. Rochester) **Experimental psychology.** New York: John Wiley, 1960. 595 p. \$6.95.—Part I (8 chapters) provides an introduction to psychology as a science, the design and conduct of experiments, statistics and statistical inference, psychophysical methods and scaling, the writing of research reports, and the interaction of research and theory. Part II (11 chapters) discusses research in selected areas of human experimental psychology: visual and auditory processes and perception, word association and meaning, rote learning, perceptual-motor behavior, retention, transfer of training, problem solving and social processes. The emphasis is upon research methodology and reviews of pertinent research with omission of lengthy historical material, physiological mechanisms, and a selectivity over the theoretical questions which are discussed. References and lists of additional readings follow each chapter, and statistical tables are appended.—J. Arbib.

2977. Baker, Lawrence M., Weisiger, Carroll, & Taylor, William M. (Purdue U.) **Laboratory experiments in general psychology.** New York: Oxford Univ. Press, 1960. 110 p. \$2.25.—22 short experiments representing "most of the major areas of experimental psychology" are presented. Each experiment includes a simple statement of the problem, a list of materials and apparatus, a suggested procedure, instructions for handling the data, questions for discussion and conclusions, and a list of references. Forms are provided for recording data. Students are urged to write experiments in conformity with APA publication requirements.—C. J. Adkins.

### PSYCHOPHYSICS

(See also Abstract 4145)

### PERCEPTION (General)

2978. Adcock, C. J. **Perception.** *Acta psychol. Amst.*, 1960, 17, 398-406.—To what extent can perceptual theories be reconciled within a general the-

ory? Basic problems are examined and 7 fundamental assumptions presented. The act of perception is salient for simple stimuli, structured for more complex stimuli. Specific factors include the degree and nature of drive activation and the nature of the preceding activity.—G. Rubin-Rabson.

2979. Barthol, R. P. **Kinesthetic figural after-effect under a drowsy state induced by hypnosis.** *Percept. mot. Skills*, 1960, 11, 58.—"Results [for hypnotized Ss, who estimated the length of a 1½" bar] were identical with those of Ss who were satiated while awake, i.e., final judgments were significantly smaller than control judgments. ... The results ... demonstrate that the KAE occurs independently of wakefulness or even of S's attention to the satiation process."—C. H. Ammons.

2980. Boardman, W. K., Aldrich, R. C., Reiner, M. L., & Goldstone, S. (Baylor U.) **The effects of anchors on apparent length.** *J. gen. Psychol.*, 1959, 61, 45-49.—A white horizontal line was exhibited to 61 college students for 0.5 sec. The initial stimulus ("anchor") for one group was 1.0 in. in length, for another 2.0 in., for a third 0.1 in. All were asked to judge whether the line shown was more or less than one inch long. "Judgments showed no significant anchor effect. ... An anchor-reversed condition produced a significant change in judgments of the 0.1 in. initial anchor group but not in those of the 2.0 in. initial anchor group."—H. Ruja.

2981. Chatterjea, R. G. (Calcutta, India) **Estimation of short temporal duration in two sense modalities by the method reproduction.** *Indian J. Psychol.*, 1958, 33, 21-24.—All stimulus durations (0.2-1.0 seconds) are overestimated for both visual and auditory presentations of stimuli.—C. T. Morgan.

2982. Chatterjee, R. G. (Calcutta, India) **The estimation of temporal intervals in different sense modalities: An experimental study.** *Indian J. Psychol.*, 1956, 31, 121-124.—Ss estimated stimulus times of 1.5, 1.0, and .5 sec. for pressure, light, and sound stimuli. In all 3 modalities, they overestimated the .5 sec. interval, but underestimated the 1.0 and 1.5 sec. interval.—C. T. Morgan.

2983. Corah, N. L. (U. Buffalo) **The relationship between individual differences in level of "arousal" and kinesthetic figural after-effects, figure reversals, and disjunctive reaction time.** *Dissertation Abstr.*, 1960, 21, 1624.—Abstract.

2984. Dember, William N. (U. Cincinnati) **The psychology of perception.** New York: Henry Holt, 1960. xi, 402 p. \$6.50.—A presentation of "the generalizations or principles that have emerged from the empirical investigations of perception." Attention is given to the research methods used and the data acquired.—R. F. Allen.

2985. Eysenck, H. J., & Holland, H. (Inst. Psychiatry, U. London, England) **Two measures of figural after-effect.** *Indian J. Psychol.*, 1958, 33, 85-92.—2 tests of figural aftereffect, one a brightness matching test and the other a circle matching test, gave reliable individual differences but failed to correlate significantly with measures of extraversion.—C. T. Morgan.

2986. Gardner, R. A. (QM Research Engineering Center, Natick, Mass.) **A note on theory and**

methodology in the study of figural aftereffects. *Psychol. Rev.*, 1960, 67, 272-276.—A theory with paradigms is presented to show that "asymmetrical displacements are a logically necessary consequence of Kohler's assumptions in a wide variety of situations."—C. T. Morgan.

2987. Hörmann, Hans. (U. Göttingen, Germany) **Konflikt und Entscheidung: Experimentelle Untersuchungen über das Interferenzphänomen.** [Conflict and decision: Experimental investigation of the interference phenomenon.] Göttingen, Germany: Verlag für Psychologie, 1960. 118 p.—Supported by his experimental data, the author finds that the origin of personality-specific inference phenomena, caused by objects or stimuli that can be perceived under more than 1 aspect, involves more than 1 phase sequence. This is in agreement with Hebb's findings that the stability of a perception is not a single persistent pattern of cerebral activity but the tendency of the phases of an irregular cycle to recur at short intervals. It is the author's view that those Ss showing greater interference tendencies may be characterized by their hierarchical order of cortical organization being achieved at a slower rate and being less specific and representative of a more general coding system.—K. M. Newman.

2988. Ittelson, W. H. (Brooklyn Coll.) **Visual space perception.** New York: Springer, 1960. ix, 212 p. \$6.00.—A systematic account of an approach to perception developed over the past 12 years, described in part in previous publications with Cantril, Kilpatrick, and Slack. The major characteristics of perception are conceived to be "transaction," "uniqueness," and "externalization." The central problem of perception is "to study the degree of correspondence between the significances which we externalize and those which we encounter and to understand the process by which this correspondence is achieved." Chapter titles are "Introduction"; "What Is Perception"; "The Perceptual Process"; "Visual Cues, Equivalent Configurations, the Invariance Hypothesis"; "Size, Shape, Perspective"; "Movement Parallax, Overlay, Togetherness Cues"; "Binocular Stereopsis"; "Accommodation and Convergence"; "The Temporal Course of Perception, Perceptual Conflicts"; and "The Perception of Persons As Visual Objects."—C. T. Morgan.

2989. Metzger, W., Barck, W., & Richter, H. (U. Münster i. W., Germany) **Eine Beobachtung ueber den Einfluss des sogenannten "Restfaktors" auf die Unterschiedsschwelle gesehener Laengen.** [On the effects of the "remaining factor" of Wertheimer.] *Psychol. Beitr.*, 1960, 4, 91-97.—The quantitative effect of Wertheimer's remaining factor is described. If a line of points (the points having the same distance from each other) is varied so that the line of points shows (in an alternating fashion) longer and shorter distances between points, then the shorter distance between 2 points becomes obvious sooner (if a "pairing" of points is made possible by shortening the distance between 2 points). This effect becomes obvious much later, if the line of points shows (at each end) a single remaining point. (English & French summaries)—H. J. Priester.

2990. Mountjoy, Paul T. (Denison U.) **Fixation and decrement to the Müller-Lyer figure.**

*Psychol. Rec.*, 1960, 10, 219-223.—"Comparisons of decrement to the Müller-Lyer figure under conditions of fixation point and roving eye were interpreted as supportive of the habituation hypothesis and not supportive of the satiation hypothesis. Fixation points did not produce statistically significant effects. Statistically significant spontaneous recovery did occur. Sophistication and naivete concerning the figure were unrelated to the occurrence of decrement."—R. J. Seidel.

2991. Powers, W. T., Clark, R. K., & McFarland, R. L. **A general feedback theory of human behavior. Part I. Percept. mot. Skills**, 1960, 11, 71-88. (Monogr. Suppl., 1960, I-VII, \$1.00.)—The technical account of the model may be nontechnically described. "A system at a given order has goals given to it by higher-order systems. These goals are in the form of perceptual images of past experiences or combinations of past experiences. The system acts to make its present perceptual field match the goal-field as nearly as possible. It does not act directly on the external world, but on the only environment with which it is in immediate contact, the set of next-lower-order systems. Its action is that of selecting and stimulating goals for lower-order systems; it is capable of perceiving the signals (either feedback or reference) resulting from its selection, so a set of lower-order signals can be specified which, if achieved, would be interpreted by the system's own feedback function as the required magnitude of perceptual variable."—C. H. Ammons.

2992. Schureck, P. J. **Studies in the perception of apparent visual movement.** *Aust. J. Psychol.*, 1960, 12, 101-116.—3 experiments are described which "offer specific statements regarding the limits and optimal values of some of the environmental conditions necessary for the perception of the phi-phenomenon."—P. E. Lichtenstein.

2993. Thayer, Lee O., & Pronko, N. H. (U. Oklahoma) **Factors affecting conceptual perception in reading.** *J. gen. Psychol.*, 1959, 61, 51-59.—Students assigned traits to a character in a short, ambiguous passage from fiction in accordance with wishful thinking and in response to information supplied to them.—H. Ruja.

2994. Thurner, F. (Schöpfstrasse 41, Innsbruck) **Probleme und Ergebnisse der Nacheffektmessung.** [Problem and results of the measurement of aftereffects.] *Psychol. u. Prax.*, 1960, 4, 175-177.—5 experiments were conducted with 50 Ss to investigate visual, auditory, and kinesthetic aftereffects. In general aftereffects were shown to be a logarithmic function of stimulus duration. Results were plotted individually for each S. The use of an average measure of aftereffects for a group of Ss was found to be faulty. The results did not support Jaensch's hypothesis of a general aftereffect factor.—H. Roemich.

2995. Zender, H. B. (U. Kansas) **Studies in judgment: The status of judgment and perception. Reference displacement of values in ascribed judgment.** *Dissertation Abstr.*, 1960, 21, 1627.—Abstract.

(See also Abstracts 3097, 3229, 3286, 3302, 3409(a), 3509, 3729)

## VISION

2996. Bhatia, Balraj. (Defence Science Lab., New Delhi, India) **Some factors determining the maximum angular velocity of pursuit ocular movements.** *J. opt. Soc. Amer.*, 1960, 50, 149-150.—"The results indicate that the maximum angular velocity of eye movements is equal to  $57.3s/d(bs + a)$  where  $s$  is the vertical dimension of the slit [in front of the object],  $d$ , the distance between the observer and the moving object, and  $b$  and  $a$  are constants for the individual. It is concluded from the above relationship that  $s$  and  $d$  independently influence the maximum angular velocity of eye movements and not by altering the pattern of image on the retina. The results confirm the hypothesis that the maximum angular velocity of eye movements is related to the perceived dimensions of the slit. Further, it is postulated that the visual cues for distance perception are responsible for the inverse linear relationship between the response of the eyes to a given stimulus pattern in the psychovisual cortex and the distance of the observer from the object."—D. S. Blough.

2997. Christensen, Haaken. **Visually observed traces of a high frequency eye vibration.** *Acta ophthalm. Kbh.*, 1959, 37, 227-233.—"The magnitude of the rapid eye vibration is deduced from certain narrow contrast stripes which appear sometimes on a horizontal border of a black and a white flat during fixation. . . . The study of the two stripes shows that they are called forth in one and the same . . . broad retinal stripe occupying alternating positions, once on the black and then on the white side of the border image. The movement of the stripe from one side to the other is not perceived. . . . Therefore both contrast stripes are memories during the eye movement. Each contrast stripe is found to be a memory also during the stay of the retinal stripe on the opposite side of the border."—M. M. Berkun.

2998. Flom, Merton C. (U. California) **On the relationship between accommodation and accommodative convergence: I. Linearity.** *Amer. J. Optom.*, 1960, 37, 474-482.—Repeated measurements of accommodation and accommodative convergence were made on 12 Ss. The relation between amount of accommodation (diopters) and amount of convergence (prism diopters) departed significantly from linearity for most Ss. However, the amount of departure from linearity was small "and will have a negligible effect on the amount and stability of the AC/A ratio."—E. G. Heinemann.

2999. Flom, Merton C. (U. California) **On the relationship between accommodation and accommodative convergence: Part II. Stability.** *Amer. J. Optom.*, 1960, 37, 517-523.—AC/A ratios (accommodative convergence/accommodation) were measured weekly during a 9-week period on 4 Ss in order to determine the "stability" of this ratio. During the 9-week period the standard deviations did not exceed 0.25 prism diopters. Most of the variability is attributed to "random error of measurement" though there is some evidence that the AC/A ratio decreases with practice.—E. G. Heinemann.

3000. Harker, George S. (United States Army Medical Research Center, Fort Knox, Ky.) **Two stereoscopic measures of cyclorotation of the eyes.** *Amer. J. Optom.*, 1960, 37, 461-473.—"Efforts to

demonstrate the equivalence of two stereoscopic measures of cyclorotation resulted in the detection of an unsuspected relationship between the cyclorotational state and the available visual stimulation to facilitate the lateral and vertical coordination of the eyes. This relationship was evident in the cyclorotational adjustment of the eyes to the presence or absence of a peripheral circle in the measuring configuration."—*Author summary.*

3001. Korzh, N. N. (Moscow U., USSR) **Irradiatsiya tormozheniya na nesignal'ny svetovoi razdrazhitel' v sisteme orientirovochnogo refleksa.** [Irradiation of inhibition to a nonsignaling visual stimulus in the system of the orienting reflex.] *Dokl. Akad. Pedag. Nauk RSFSR*, 1959, No. 6, 95-98.—This study is about the relationship between the extinction of an orienting reflex and the inhibition of a conditioned reflex. A visual stimulus was presented by means of a perimeter to different points of the visual field of 7 Ss (20-25 years of age) and the following components of the orienting reflex were measured: EEG, GSR, respiration rate, eye movements, and muscular tone. It was found among other results that the visual stimulus can be quite accurately analyzed by means of the orienting reflex; e.g., a difference of 5° on the perimeter was perceived as a new stimulus by the Ss.—A. Cuk.

3002. Rashbass, Cyril. (U. London, England) **New method for recording eye movements.** *J. Opt. Soc. Amer.*, 1960, 50, 642-644.—". . . the difference between the light scattering ability of the cornea and of the sclera . . . [controls] the position of a cathode-ray tube spot in such a way that its focused image is kept fixed to the limbus. . . . [The method] is particularly suited to horizontal movements in the range of 0.1-10 deg. The speed of response is 5 msec."—D. S. Blough.

3003. Rausch, E. (U. Frankfurt, Germany) **Eine stroboskopische Versuchsanordnung.** [An apparatus for stroboscopic experiments.] *Psychol. Beil.*, 1960, 4, 110-117.—Description of a stroboscopic apparatus that work with a system of glimmering lights. Conditions of the experiment can easily be changed, thus making possible a maximum of variability in stimulation. A novelty is the lightening up of an "inner" and "outer" field, thereby a ground for special movement phenomena is produced. (English & French summaries)—H. J. Priester.

3004. Riggs, Lorin A., & Niehl, Elizabeth W. (Brown U.) **Eye movements recorded during convergence and divergence.** *J. Opt. Soc. Amer.*, 1960, 50, 913-920.—Direct photography was used to record horizontal binocular eye movements. Collimated beams of light were reflected from mirrors mounted on contact lenses. "The records show that the eyes exhibit relatively rapid and accurate motions of vergence when fixating alternately a near and a far test object. There is no evidence for a systematic discrepancy between the extent of vergence and the geometrical location of the test object. It is concluded that when fusion is maintained, the images of a fixation object are brought to corresponding areas of the retina to an accuracy of about two minutes of arc. This finding is consistent with the reported sizes of Panum's area and the region of optimal visual resolution."—D. S. Blough.



3005. Shackel, B. (E.M.I. Electronics Ltd., Hayes, England) **Note on mobile eye viewpoint recording.** *J. Opt. Soc. Amer.*, 1960, 50, 763-768.—“A motion picture or television camera upon the head records the immediate visual field, and the viewpoint is marked by a superimposed white spot from the eye-ball position recording apparatus. The records analyzed cast some doubt on the usually accepted latency of coordinate compensatory eye movements.”—D. S. Blough.

3006. Smith, William M., & Warter, Peter J. (Dartmouth Coll.) **Eye movement and stimulus movement: New photoelectric electromechanical system for recording and measuring tracking motions of the eye.** *J. Opt. Soc. Amer.*, 1960, 50, 245-250.—“A new technique of eye-movement measurement based upon a photoelectric principle is described. . . . A system for generating a moving target whose velocity, displacement, form, intensity, and other characteristics can be varied systematically also is described. . . . Eye movements of less than one degree can be measured with less than 10% error. Optical modifications of the present system will make possible the measurement of much smaller movements of the eye.”—D. S. Blough.

3007. von Noorden, Gunter K., & Burian, Hermann M. (State U. Iowa, Coll. Medicine) **Perceptual blanking in normal and amblyopic eyes.** *Arch. Ophthalmol., Chicago*, 1960, 64, 817-822.—A brief flash of light following a tachistoscopic stimulus will bar perception of the first information, depending upon time intervals and brightnesses. 7 normals and 6 amblyopia patients were tested for perception time—the critical interval after which a blanking flash is ineffective. The present experimental procedure yields mean normal perception time of 30 msec., and blanking at 23 msec., or slightly less than the measurements of Lindsley. Amblyopic eyes gave significantly longer times than sound fellow eyes. Other facts require consideration of retinal events as well as central functions, and the information to one eye, blanking flash to the other procedure is suggested for further experiments.—R. L. Sulzer.

(See also Abstracts 3478, 3492, 4206, 4220)

#### Space & Object Perception

3008. Brock, Frederick W. (Staten Island, New York) **Parallel alleys as clues to the constitution of visual space.** *Amer. J. Optom.*, 1960, 37, 395-402.—The experiments reported deal with the question: “In what manner does an actual alley which is seen monocularly as parallel and nonconvergent differ from an actual alley seen binocularly the same way when inspection is permitted in as normal a situation as possible?” Results reported are for 1 S who adjusted 2 6-foot strings until they appeared parallel. A mathematical statement of the relation between physical and visual space is developed.—E. G. Heine-mann.

3009. Campbell, F. W., & Gregory, A. H. (U. Cambridge, England) **The spatial resolving power of the human retina with oblique incidence.** *J. Opt. Soc., Amer.*, 1960, 50, 831.—“The magnitude of the change in resolving power with oblique incidence measured by interference fringes is less than that

found using an off-centered entrance pupil and grating test targets.”—D. S. Blough.

3010. Carter, D. C. (U. Houston) **Studies in fixation disparity: III. The apparent unicocular components of fixation disparity.** *Amer. J. Optom.*, 1960, 37, 408-419.—“The apparent division of fixation disparity between the two eyes was determined for 23 subjects. It is concluded that persons with normal binocular vision subjectively show an equal division of fixation disparity. Those subjects whose experimental results definitely indicated an undivided fixation disparity were subjects who had a history of partial suppression of one eye. The results of these experiments give no support to the belief that the sighting dominant eye is usually dominant in directionalization with persons with normal binocular vision and no history of partial suppression.”—Author summary.

3011. Dunn, B. E. (U. Wisconsin) **Monocular cues for depth-perception and the invariance hypothesis.** *Dissertation Abstr.*, 1960, 21, 1635.—Abstract.

3012. Humphries, M. **Errors in marking the centres of lines, circles, and lenticular figures as a function of size.** *Percept. mot. Skills*, 1960, 11, 67-70.—“Ten Ss marked the centres of a series of lines, circles, and lenticular figures. The analysis of the absolute errors revealed that the magnitude of error is independent of the shape and orientation of the figure. Although the absolute error is generally about 1% of the length of the dimension, in the cases of dimensions less than 1 in. in length there is a suggestion that there is a departure from linearity.”—C. H. Ammons.

3013. Keesey, Ulker Tulunay. (Brown U.) **Effects of involuntary eye movements on visual acuity.** *J. Opt. Soc. Amer.*, 1960, 50, 769-774.—“Three types of acuity target—vernier, fine line, and grating—were observed for varying exposure durations under two viewing conditions. One was the ‘stabilized image’ condition. . . . The other viewing condition was optically the same except that the eye movements produced normal motions of the retinal image. . . . Acuity was found to improve with increasing exposure time up to about 0.2 sec under both viewing conditions. The main conclusion is that acuity is neither enhanced nor impaired by the involuntary eye movements that are present during the inspection of a test object.”—D. S. Blough.

3014. Kincaid, Wilfred M., Blackwell, H. Richard, & Kristofferson, Alfred B. (U. Michigan) **Neural formulation of the effects of target size and shape upon visual detection.** *J. Opt. Soc. Amer.*, 1960, 50, 143-148.—A hypothesis is presented, the chief assumptions of which are that neural impulses originating in retinal receptors converge upon neurons in a central area, and that the excitation of the most excited neuron in that area determines the response. The relation of this hypothesis to earlier ideas along similar lines is discussed. It is shown that the hypothesis leads to testable relationships between thresholds for circular targets and for targets of other shapes. Evidence is presented that diffuse neural connection are relatively more important at low background levels, and an interpretation is suggested.—Journal abstract.



3015. Zigler, E. Size estimates of circles as a function of size of adjacent circles. *Percept. mot. Skills*, 1960, 11, 47-53.—"A variation of the Delboeuf illusion was employed to study the effect of the size of adjacent circles on the apparent size of the inner circle. Ten stimuli were used, nine having center circles 2 cm. in diameter, surrounded by circles of varying sizes. One stimulus was a solitary circle 2 cm. in diameter. These stimuli were presented to 10 students by the method of paired comparison. Percentage scores were calculated for each stimulus. The data indicated that the center circle appeared smaller as the adjacent circles became larger. Helson's Adaptation-level formula . . . indicated the ratio of the inner circle to the outer circles was approximately .77. . . . The solitary circle . . . was judged smaller than all of the other center circles with the exception of the center circle surrounded by circles 10 cm. in diameter. . . . The contrast effect becomes operative when the ratio of the adjacent to the inner circle is 5:1."—C. H. Ammons.

(See also Abstract 3500)

#### Color Vision

3016. Bailey, R. W. (Ohio State U.) The effect of chromatic adaptation on color-blind observers. *Amer. J. Optom.*, 1960, 37, 499-516.—For 1 protanopic and 1 deuteranopic O the blue-yellow mixtures required to match a gray were measured after adaptation to red and blue light. For 1 deuteranomalous O the red-green mixture required to match a yellow after adaptation to red and green lights was measured. For all conditions curves of recovery from chromatic adaptation were also determined. "One can convert a deuteranomalous observer to a normal observer by red adaptation."—E. G. Heine-mann.

3017. Bartleson, C. J. (Eastman Kodak, Rochester, N.Y.) Memory colors of familiar objects. *J. Opt. Soc. Amer.*, 1960, 50, 73-77.—The memory colors of 10 familiar, naturally occurring objects have been determined. 50 Os chose their memory colors from an array of 931 Munsell color chips. The variability of the judgments is shown, and their means are compared with the average chromaticities of the corresponding natural objects. The 10 mean memory colors were all significantly different from the natural colors. Each memory color tended to be more characteristic of the dominant chromatic attribute of the object in question; grass was more green, bricks more red, etc. In most cases, saturation and lightness increased in memory.—*Journal abstract*.

3018. Billmeyer, F. W., Jr., Beasley, J. K., & Sheldon, J. A. (E. I. du Pont de Nemours & Co., Wilmington, Del.) Formulation of transparent colors with a digital computer. *J. Opt. Soc. Amer.*, 1960, 50, 70-72.—A digital computer was programmed to calculate the concentrations required to produce a given transparent color by mixing soluble dyes. The computation is based on Beer's law calculations at 65 wavelengths across the visible spectrum. The color to be formulated is specified in terms of CIE tristimulus values derived from instrumental measurement. The computer formulation technique was tested by making up to computed formulas a series

of mixtures of dyes in a solvent and in an acrylic resin. The correspondence was good between the measured colors of the mixtures and those for which the formulations were calculated, as indicated by differences averaging about 1 NBS unit (Adams chromatic value formula, normalized as in ASTM Method D 1482-57T).—*Journal abstract*.

3019. Friel, Edward. (Seattle, Wash.) New pigment-mixture data. *J. Opt. Soc. Amer.*, 1960, 50, 791-801.—In earlier work the writer presented a graphic technique for summarizing information about the colors resulting from pigment-mixture, along with data for the pigments of a selection at lightness 9 of a 10-step scale. Similar information about the colors resulting from mixture of the same pigments at lightnesses 7, 5, 8, and 1 of the same scale is presented here. This shows that by using different positions for some pigments at different lightnesses, information about the colors resulting from mixture of the pigments at these lightnesses also can be summarized very well in graphic form. A technique for assembling the pigment positions for all the given lightnesses on a single diagram is introduced.—*Journal abstract*.

3020. Indow, Tarow, & Kanazawa, Kei. (Keio U., Tokyo, Japan) Multidimensional mapping of Munsell colors varying in hue, chroma, and value. *J. exp. Psychol.*, 1960, 59, 330-336.—The sense distances between all possible pairs of 24 colors were scaled by the method of multiple ratio judgment. The method of multidimensional scaling was then applied. The axis corresponding to the Munsell value was orthogonal to the plane of constant lightness, and the configuration of the colors in terms of Munsell hue and chroma was in agreement with that previously obtained. The relation of the distances between all possible pairs of the points plotted in the 3-dimensional configuration to the scaled sense distances from which the mapping was made was not linear but parabolic.—*J. Arbit.*

3021. Indow, Tarow, & Uchizono, Tsukiko. (Keio U., Tokyo, Japan) Multidimensional mapping of Munsell colors varying in hue and chroma. *J. exp. Psychol.*, 1960, 59, 321-329.—21 colors were compared with a standard. As each of the 21 took the place of the standard, a matrix was obtained whose elements were the ratio scales of the differences between all possible pairs of the 21 colors. The method of multidimensional scaling was applied to this matrix. Colors of the same Munsell hue appeared along a line segment in the order corresponding to their chroma.—*J. Arbit.*

3022. Judd, Deane B. (National Bureau Standards, Washington, D.C.) Appraisal of Land's work on two-primary color projections. *J. Opt. Soc. Amer.*, 1960, 50, 254-268.—"It is shown that no new theory is required for the prediction of Land's result that two-primary color projections can produce object-color perceptions of all hues; nor for his result that many choices of pairs of primaries yield substantially the same object-color perceptions. Land's hypothesis that when the colors of the patches of light making up a scene are restricted to a one-dimensional variation of any part, the observer usually perceives the objects in that scene as essentially without hue, is new; several special cases of it are

supported by previous work as well as Land's."—*D. S. Blough.*

3023. Land, Edwin H. (Polaroid Corp., Cambridge, Mass.) **Some comments on Dr. Judd's paper.** *J. Opt. Soc. Amer.*, 1960, 50, 268.—The writer refers to Judd's appraisal of his work with 2-primary color projections. Judd's "formulas are wavelength-rich and time-dependent; our experiments demand formulas which are nearly independent of wavelength and fully independent of time."—*D. S. Blough.*

3024. Nickerson, Dorothy. (United States Dept. Agriculture, Washington, D.C.) **Light sources and color rendering.** *J. Opt. Soc. Amer.*, 1960, 50, 57-69.—Light sources for many problems in agriculture and industry require good color rendering; standards are needed for both special and general purpose lamps. Target standards are discussed; and color, relative spectral distributions, and lumen efficiency data are provided for typical incandescent and fluorescent lamps. Data for color samples calculated for triads of light sources studied by an I.E.S. [Illuminating Engineering Society] Subcommittee on Color Rendition of Light Sources are used to demonstrate the comparative size and direction of color differences involved in common situations. Problems raised by chromatic adaptation are discussed, as are specifications and standards for sources used for color work in various specialized industries, and the progress being made by I.E.S. and CIE committees on color rendering.—*Journal abstract.*

3025. O'Neil, W. M. **Coloured papers for laboratory use.** *Aust. J. Psychol.*, 1960, 12, 117-120.—A method is described for painting papers for use in undergraduate experiments on color. The painted papers match the Munsell chips reasonably well in total luminous reflectance and predominant wavelength.—*P. E. Lichtenstein.*

3026. Rheinboldt, Werner C., & Menard, John P. (National Bureau Standards, Washington, D.C.) **Mechanized conversion of colorimetric data to Munsell rennotations.** *J. Opt. Soc. Amer.*, 1960, 50, 802-807.—"A program for a high-speed digital electronic computer is described for performing the computation of the Munsell rennotations H, V, C corresponding to given CIE chromaticity coordinates x, y and daylight reflectance Y."—*D. S. Blough.*

3027. Sterling, Harry G. (USN Medical Research Lab., New London, Conn.) **Case of congenital tritanopia with implications for a trichromatic model of color reception.** *J. Opt. Soc. Amer.*, 1960, 50, 156-163.—The luminous efficiency of the spectrum, dichromatic coefficients, spectral color confusions, and matches of spectral to pigment colors were obtained on a congenital tritanope. The results are compared with those obtained by Wright and by Thomson and Wright. The conclusion is drawn that a point close to the spectrum locus in the violet region of the normal chromaticity plane has been reliably located as representing a "missing" receptor process, according to the Helmholtz theoretical development. The possible implications of this finding are pursued with reference to the theoretical primary receptor functions of normals and the question of a theoretically derived equal chromaticity space.—*Journal abstract.*

3028. Von Schelling, Hermann. (General Electric Co., Schenectady, N.Y.) **In memoriam: Dean Farnsworth, CDR, MSC, USNR. New derivation for the deuteranopic copoint.** *J. Opt. Soc. Amer.*, 1960, 50, 645-647.—It is assumed that deuteranopes cannot discriminate between red and green. A particular deuteranopic copoint is associated with any chosen color triangle under this condition. The copoint is calculated for 6 color triangles suggested in literature. The results fall only in 2 cases into the range found experimentally by Dean Farnsworth.—*Journal abstract.*

3029. Vos, J. J. (Inst. Perception RVO-TNO, Soesterberg, Netherlands) **Some new aspects of color stereoscopy.** *J. Opt. Soc. Amer.*, 1960, 50, 785-790.—". . . color stereoscopy . . . is usually explained in terms of the chromatic aberration of the eye, together with the eccentric position of the fovea. In this paper we demonstrate that this theory only partly explains the phenomenon and that the misorientation of the retinal receptors—as it become manifest in the Stiles-Crawford effect—must have an equivalent influence. . . . we could prove that this 'Stiles-Crawford component' is of the same order of magnitude as the original 'visual axis-component.' Since both components seem to work antagonistically, we can easily explain why so many subjects see blue in front of red objects instead of the reverse."—*D. S. Blough.*

3030. Walraven, P. L., & Bouman, M. A. (Inst. Perception RVO-TNO, Soesterberg, Netherlands) **Relation between directional sensitivity and spectral response curves in human cone vision.** *J. Opt. Soc. Amer.*, 1960, 50, 780-784.—A theory is presented that springs from color phenomena associated with the Stiles-Crawford effect. Oblique light leaks from the receptor segments; thus, its effective path in the receptor is shortened. This narrows the spectral absorption curve, relative to that for light of perpendicular incidence. "As absorption curves for the red, green, and blue pigments we used Pitt's curves. The agreement of different experimental data with this theory strongly supports the Young-Helmholtz hypothesis, as far as the receptor layer is concerned, and also indicates that the curves derived by Pitt are fairly good approximations of the absorption curves of the photo-pigments after correction for absorption of light by the ocular media."—*D. S. Blough.*

3031. Wright, Hilton, & Wyszecki, Günter. (National Research Council, Ottawa, Canada) **Field trial of 10° color-mixture functions.** *J. Opt. Soc. Amer.*, 1960, 50, 647-650.—The recently proposed 10° color-mixture functions derived by Judd from the Stiles-Burch and Speranskaya data have been tested on a MacAdam type binocular colorimeter in conjunction with a set of suitable colored glass filters. The average color matches obtained from 5 observers agree only in part with those predicted from the proposed 10° color-mixture functions. Signification discrepancies were found in the blue, bluish-green, near-white, and green region of the color gamut while good agreement was obtained in the yellow, orange, red and purple region. The results confirm similar findings reported by Wyszecki and Stiles-Wyszecki.—*Journal abstract.*

## Visual Sensitivity

3032. Bartley, S. Howard, & Nelson, Thomas. (Michigan State U.) **Equivalence of various pulse-to-cycle fractions in producing critical flicker frequency.** *J. Opt. Soc. Amer.*, 1960, 50, 241-244.—"An earlier investigation of the senior author suggested very strongly that various quite different PCF's (pulse-to-cycle fractions) were, under some conditions, equivalent in producing CFF. . . . The CFF's for each of the following PCF's  $\frac{1}{30}$ ,  $\frac{1}{8}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ ,  $\frac{7}{8}$ , and  $\frac{29}{30}$ , were obtained as the photic intensity was varied. In Part I, the range was from 1.28 c/ft<sup>2</sup> to 1164 c/ft<sup>2</sup>. In Part II, the range was from 0.014 c/ft<sup>2</sup> to 1400 c/ft<sup>2</sup>. The data produced families of curves, one curve for each PCF. Some pairs of these curves crossed each other, the points of crossing indicating that, under those conditions, two PCF's were equivalent."—D. S. Blough.

3033. Dreyer, V. (U. Copenhagen, Denmark) **On visual contrast thresholds.** *Acta Ophthalmol., Kbh.*, 1960, 38, 470-484.—An investigation of the contrast thresholds for various small visual angles yielded the following results: (a) above a critical visual angle of the stimulus, the contrast threshold was independent of the angle, while below it, threshold increased progressively with decreasing visual angle. (b) With moderate background luminances, a framing of the field lowered the threshold for positive stimuli seen under large visual angles. In such cases, the stimulus was experienced as brighter than the background, even though its luminance was less than that of the background. (c) When the background area was reduced by framing and a negative stimulus visual angle was less than a critical minimum value, stimuli were perceived as darker than the background although their luminance was greater than that of the background. (d) When background luminance was sufficiently great, the threshold was independent of the visual angle of stimulus for the just imperceptible negative stimulus.—M. S. Katz.

3034. Ekman, Gösta; Eisler, Hannes, & Künnapas, Teodor. **Brightness of monochromatic light as measured by the method of magnitude production.** *Acta psychol., Amst.*, 1960, 17, 392-397.—A brightness scale was constructed by the method of magnitude production for monochromatic light varying with regard to intensity of stimulation as well as wave length. Brightness was studied as a function of stimulus intensity for each wave length separately. Data could be described by power functions. Exponents for 6 wave lengths were nearly constant. The additive stimulus constant of the power functions fitted to the data was shown to be closely related to supraliminal brightness. The inverted value of the constant approximately describes brightness as a function of wave length when stimulus intensity is kept constant, suggesting the possibility of reducing the number of parameters necessary to describe brightness as a function of stimulus properties.—G. Rubin-Rabson.

3035. Hanson, John A., Anderson, Edythe M. S., & Winterberg, Richard P. (Tufts U.) **Studies on dark adaptation: V. Effect of various sizes of centrally fixated preexposure fields on foveal and peripheral dark adaptation.** *J. Opt. Soc. Amer.*, 1960, 50, 895-899.—Absolute brightness sensitivity

was measured monocularly with a 1° circular test patch. Dark adaptation curves were found for the fovea and 3 peripheral locations. Pre-exposure fields were varied in size and luminance. "The foveal results, with one exception, indicated that size is not a differential factor. In the periphery, the effects of size were most pronounced between those sizes which did and those which did not stimulate the area tested."—D. S. Blough.

3036. Hanson, John A., Anderson, Edythe M. S., & Winterberg, Richard P. (Tufts U.) **Studies on dark adaptation: VI. Effects on foveal dark adaptation of series of alternating light and dark periods.** *J. Opt. Soc. Amer.*, 1960, 50, 900-902.—Absolute brightness thresholds were measured monocularly. S observed a 37.5° pre-exposure field, then a 1° test patch, both centrally fixated. Pre-exposure luminance, number of presentations, and light-dark period combinations were varied. The durations of dark period necessary to avoid the cumulative effects of successive light periods were determined.—D. S. Blough.

3037. Hopkinson, R. G. (Building Research Station, Hertfordshire, England) **Experiment on the assessment of brightness under "free-choice" and "forced-choice" conditions by a group of observers.** *Ergonomics*, 1960, 3, 44-50.—"Thirty-four architects and civil servants simultaneously assessed the brightness of a series of light spots under three conditions: no reference, brightest and dimmest lights shown before the test, and with prescribed numbers for brightest and dimmest. Results in just two tests conformed to previous studies; subjects appeared to be upset by instructions in the third condition."—B. T. Jensen.

3038. Hovnanian, H. Philip. (AVCO Corp., Wilmington, Mass.) **Scanning-mechanism hypothesis of vision.** *J. Opt. Soc. Amer.*, 1960, 50, 921.—Spinning propeller blades produced flicker in extrafoveal vision much lower than stimulus light-and-dark frequency. It is proposed that this observation may arise from beats between the stimulus frequency and a retinal scanning frequency.—D. S. Blough.

3039. Luria, S. M., & Schwartz, Ira. (USN Medical Research Lab., New London, Conn.) **Effect of differential binocular adaptation on scotopic acuity.** *J. Opt. Soc. Amer.*, 1960, 50, 251-253.—Monocular scotopic acuity thresholds were determined for 3 observers when both eyes were dark adapted and also when only the observing eye was dark adapted while the nonobserving eye was exposed to a brightness of 100 ft-L between the target presentations. Although the observers reported that the targets looked quite different under the 2 conditions, acuity remained substantially the same under both conditions, and it was concluded that light adapting one eye does not affect the scotopic acuity of the other eye.—Journal abstract.

3040. Sweeney, Edward J., Kinney, Jo Ann S., & Ryan, Alma. (USN Medical Research Lab., New London, Conn.) **Seasonal changes in scotopic sensitivity.** *J. Opt. Soc. Amer.*, 1960, 50, 237-240.—The scotopic sensitivity of 3 Ss was tested weekly over the course of a year. In addition, 2 measures were made to indicate each S's amount of exposure to sunlight. Scotopic sensitivity was found to be

poorest in the summer months, when exposure to sunlight was greatest, and to increase gradually during the fall and winter. The course of sensitivity over the year agreed well with the external measures of exposure to sunlight, the best single measure being the amount of "blue" light reflected by the skin.—*Journal abstract.*

3041. Sweeney, Edward J., Kinney, Jo Ann S., & Ryan, Alma P. Standardization of a scotopic sensitivity test. *USN Med. Res. Lab. Rep.*, 1959, 8(3, Whole No. 308). 8 p.—A new test of night vision consists of the presentation of spots of light of various sizes and locations in the visual field in pairs on a series of trials. The test is scored in terms of the number of spots detected correctly. Significant differences in scotopic sensitivity were detected among 108 enlisted men tested. Scores showed a fairly normal distribution. Test-retest reliability for administration of the test on 2 successive days was 0.83.—*J. L. Brown.*

3042. Wagman, I. H., & Battersby, W. S. (Mount Sinai Hosp., NYC) Neural limitations of visual excitability: II. Retrochiasmal interaction. *Amer. J. Physiol.*, 1959, 197, 1237-1242.—Binocular visual excitability changes were obtained from 2 trained observers by presenting a "conditioning" flash of light to one eye and a brief 'test' flash to a homologous retinal position in the other. . . . Results showed that threshold rose when test preceded conditioning flash, reaching a maximum increment of 0.5 log m.L. at -25 msec. separation. When test was superimposed upon conditioning flash in time, threshold dropped sharply to reach a relatively constant but elevated value for the duration of the conditioning flash. . . . These findings indicate that central (retrochiasmal) factors can influence visual sensitivity, the magnitude of this influence varying with the spatial and the temporal relations between successive light flashes.—*Journal abstract.*

3043. Wald, George. (Harvard U.) Analysis of retinal function by a two-filter method. *J. Opt. Soc. Amer.*, 1960, 50, 633-641.—These experiments rest on the fact that 2 differently colored lights are effective in some energy ratio for stimulating cones, and in some other ratio for rods. Violet and yellow test lights are used to analyze cone and rod participation in thresholds during dark adaptation to measure dark-adapted thresholds at various retinal locations, and to map the extent and depth of the macular pigmentation. "A considerable section of dark adaptation is shown to involve mixed cone and rod responses. Thresholds of the dark adapted eye near the foveal border are similarly mixed. Color sensations at the thresholds desaturate with the first participation of rods, and are wholly lost while cone activity is still prominent. The macular pigmentation becomes appreciable at some distance from the fixation point."—*D. S. Blough.*

(See also Abstracts 3101, 3157, 3178, 4170)

#### CHEMICAL SENSES

3044. Brown, I. D. (Medical Research Council, Cambridge, England) Visual and tactual judgments of surface roughness. *Ergonomics*, 1960, 3, 51-61.—"Thirty-three unskilled persons and five skilled furniture inspectors judged the relative rough-

ness of wood blocks (method of paired comparisons). Visual and tactual cues were used. The author discusses problems of inspection in factories in the light of the results of the study."—*B. T. Jensen.*

(See also Abstracts 3767, 4242)

#### SOMESTHESIS

3045. Gardner, Wallace J., Licklider, J. C. R., & Weisz, A. Z. (Cambridge, Mass.) Suppression of pain by sound. *Science*, 1960, 132, 32-33.—"Certain types of pain may be reduced or abolished by intense acoustic stimulation." A procedure involving music and noise has been effective in suppressing pain in 5000 dental operations. The music promotes relaxation, and the noise (the main agent) directly suppresses pain. The dental procedure and results are described, and an explanatory hypothesis is suggested. Parts of the auditory and pain systems come together in several regions of the reticular formation and lower thalamus. "The interactions between the two systems are largely inhibitory." Direct suppressive effect and effects mediated through relaxation, reduction of anxiety, and diversion of attention "can be explained by assuming that acoustic stimulation decreases the 'gain' of pain relays upon which branches of the auditory system impinge."—*S. J. Lachman.*

3046. Hatwell, Yvette. Étude de quelques illusions géométriques tactiles chez les aveugles. [A study of geometrical tactile illusions among the blind.] *Année psychol.*, 1960, No. 1, 11-27.—Geometrical tactile illusions have been studied to verify the hypothesis that field effects and the internal structure of geometrical figures are less pregnant and less coercive in tactile perception than in visual perception. Raised figures were presented to completely blind children and the results compared with those of sighted children. There appears to be a significant attenuation of the perceptive deformation for the vertical-horizontal and Muller-Lyer illusions and a total absence of deformation for the Delboeuf and Halteres figures. Results have been interpreted as a function of the analysis of specific modalities of perceptive tactile apprehension.—*L. A. Wauck.*

3047. McKenna, A. E. (U. Louvain, Belgium) Psychogalvanic response as a pain reaction component. *J. appl. Physiol.*, 1959, 14, 881-886.—"Psychogalvanic responses (PGR) were measured in human subjects as response to cutaneous stimulation by thermal radiation. There were 37 subjects of both sexes, aged 18-40 years and there were 2054 presentations. An apparatus for recording PGR on an EEG tracing is described. Based on physical intensity of stimulus there is a complete overlap of pain-nonpain categories—from 35° to 55° C end temperature in irradiated skin. Plotting magnitude of PGR against physical intensity of stimulus for pain and nonpain categories reveals that intensity of reaction in pain is not determined by physical intensity of stimulus. When magnitude of reaction is compared as between pain and nonpain responses on the basis of the same stimulus intensities, it is found to be greater for pain to a highly significant extent; on the same basis, duration of response is longer for pain, but not at a high level of significance. The PGR is shown to be an accurate discriminator of the subjective pain sensation threshold."—*C. T. Morgan.*



3048. Rohrer, H. (U. Vienna, Austria) **Methoden zur Registrierung und Auswertung der Mikrovibration.** [Methods for registration and evaluation of micro vibration.] *Psychol. Beil.*, 1960, 4, 118-126.—Piezo-electric, electrodynamic and photo-electric methods and oscillographs for the registration of microvibration are described. Experiments are reported in detail, likewise the principles of evaluation. (English & French summaries)—H. J. Priester.

(See also Abstract 3437)

#### HEARING

3049. Scott, S. G. (Cornell U.) **Auditory flutter fusion as a measure of effort.** *Dissertation Abstr.*, 1960, 21, 1626.—Abstract.

3050. Van Bergeijk, Willem A., Pierce, John R., & David, Edward E., Jr. (Bell Telephone Lab., Murray Hill, N.J.) **Waves and the ear.** Garden City, N.Y.: Anchor Books, Doubleday, 1960. xiii, 223 p. \$95.—The authors have selected and discussed what they consider to be the most "fascinating fragments of the vast fields of acoustics, anatomy, physiology, psychology, electronics, hydromechanics, zoology, linguistics, phonetics, and many other disciplines which have bearing on how the ear works."—A. M. Small, Jr.

(See also Abstracts 3407, 3726, 3740(a))

#### Measurements

3051. Chistovich, L. A. (Pavlov Inst. Physiology, Leningrad, USSR) **Vavlyayetsya li oshchushchenie gromkosti nepreryvnoi funktsii vremeni.** [Is the sensation of loudness a continuous function of time.] *Dokl. Akad. Pedag. Nauk RSFSR*, 1959, No. 6, 91-94.—The results of this experiment favor the hypothesis of a discrete perception of loudness and show that the size of time interval corresponding to a separate sensation of loudness averages 150 ms.—A. Cuk.

3052. Endovitskaya, T. V. **O zvukovysotnoi razlichitel'noi chuvstvitel'nosti u detei doskol'nogo vozrasta.** [Pitch discrimination in preschool children.] *Dokl. Akad. Pedag. Nauk RSFSR*, 1959, 5, 75-80.—2 problems are discussed in this study: determination of sound thresholds with preschool children, and specific processes which mediate the formation of sound sensitivity. In the 1st part of the study 40 Ss were used (age 4-7 years). In a play situation Ss were conditioned to discriminate between 2 sounds of different pitch. Both the DL and the RL were established with all Ss except those below 4 years and 6 months. These were found to be "pitch deaf." In a 2nd part of the study, 2 Ss who were "pitch deaf" (age below 4-6) were first trained to react with a hand movement to sounds of different pitches (11 sounds from 500 to 1000 cycles), and then again subjected to the experiment of the 1st part. The thresholds obtained this time were lower than with any S of the older group. Possibility was admitted of forming "the pitch sensitivity by modeling the pitch qualities through hand movements."—A. Cuk.

3053. Goldstein, Robert. (Jewish Hosp., St. Louis, Mo.) **Comparison of methods for evaluating electroencephalic responses to tones.** *J.*

*speech hear. Dis.*, 1960, 25, 303-305.—Comparison of the Withrow-Goldstein method of EEG audiometry to the Derbyshire-Farley technique. The latter requires practically no previous experience in analysis and none of the frustration involved in making yes-no decisions. Consistency in judgment is the principal requirement. Analysis of the same records by both methods shows that estimations of threshold are equal when both methods can be successfully applied, but the Derbyshire-Farley method has been successful in some cases when the Withrow-Goldstein method could not be applied.—M. F. Palmer.

3054. Hopkinson, Norma T., Katz, Jack, & Schill, Herman Allan. (U. Pittsburgh) **Instrumental avoidance galvanic skin response audiometry.** *J. speech hear. Dis.*, 1960, 25, 349-357.—Instrumental avoidance galvanic skin response audiometry has been presented as a promising tool. In this technique Ss are instructed that if they repeat words within a certain time-frame, they will avoid a shock, and many variations of this essential method are discussed in the article. The authors believe the best features of classical condition GSR method and those of standard speech audiometry are incorporated elements in this procedure.—M. F. Palmer.

3055. Lowell, Edgar L., Troffer, Carol I., Warburton, Edward A., & Rushford, Georgina M. (John Tracy Clinic, Los Angeles, Calif.) **Temporal evanation: A new approach in diagnostic audiology.** *J. speech hear. Dis.*, 1960, 25, 340-345.—The normal spontaneous activity of the cortex may be expected to average to zero. Evoked responses, particularly auditory stimuli, may be detected by repeated sampling of the EEG at fixed intervals following stimulation. 9 normal hearing college students had 3 samples of 1024 pulses presented every 63 msec. There was a negative peak at 25 msec., a positive peak at 35 msec., and a 2nd negative peak at 50 msec. Clicks of 65, 55, and 30 db. in 3 1024 unit samples were presented every 80 msec. Amplification generally increases with intensity.—M. F. Palmer.

3056. Miller, Maurice H. (Jewish Chronic Disease Hosp., Brooklyn, N.Y.) **Audiologic evaluation of aphasic patients.** *J. speech hear. Dis.*, 1960, 25, 333-339.—18 cases of right hemiplegia with aphasia, 6 cases of right hemiplegia without aphasia, and 14 cases of left hemiplegia without aphasia were given pure-tone audiometry. Speech reception thresholds were determined and discrimination tested at 40 db. above speech reception threshold and in noise. There is a higher incidence of sensorineuro impairments affecting the speech frequency range in the left hemiplegic patients than in the right hemiplegic aphasic group. High frequency losses of hearing are probably not related to the cerebrovascular accident which produced the hemiplegia. Hemiplegic patients tend to show greater threshold losses for speech than for pure tones.—M. F. Palmer.

#### Speech Perception

3057. Dreher, J. J., & Evans, W. E. (Lockheed Aircraft Corp., Burbank, Calif.) **Speech interference level and aircraft acoustical environment.** *Hum. Factors*, 1960, (Feb.), 2(1), 18-27.—"Basic concepts and formulation of the speech interference level (SIL) measure are discussed and the implica-



tions of the use of SIL to measure aircraft cabin environment are analyzed. Intelligibility tests with both words and phrases indicate that serious interference with speech can be demonstrated by adding supposedly unimportant frequencies to the SIL criterion masking band. Innocuous effects are also demonstrated by masking with low frequencies alone. Conclusions are drawn that because of the complex nature of a propeller-driven aircraft acoustic environment, SIL criteria, without qualification, are unacceptable for measuring either intelligibility or comfort.—J. M. Christensen.

3058. Gandhi, O. P., Peterson, G. E., & Yu, F. (U. Michigan) **Recurrently impulsed resonators in speech and psychophysical studies.** *Lang. Speech*, 1960, 3, 140-154.—"There is considerable reason to believe that the human observer interprets meaningful sounds in terms of the various properties of the source, rather than according to the acoustical dimensions and magnitudes of the sounds or according to psycho-acoustical abstractions such as auditory scales. Thus psychophysical data, based on abstract sounds, will never provide a full understanding of speech perception." A mathematical model of the speech source based on "The voltage response of a series of N decoupled low-pass resonator sections to the sudden application of various types of input pulse trains is" presented.—A. E. Horowitz.

3059. McConnell, Freeman; Silber, Eileen Fine, & McDonald, Douglas. (Bill Wilkerson Hearing & Speech Center, Nashville, Tenn.) **Test-retest consistency of clinical hearing aid tests.** *J. speech hear. Dis.*, 1960, 25, 273-280.—Aided discrimination scores and speech reception thresholds were determined on 40 Ss, twice on the same day. A 2nd group of 37 Ss yielded similar repeat data from tests performed 2 weeks to 3 months after the 1st test. Speech discrimination scores had a high degree of test-retest consistency, not only with one audiologist, but with those obtained with other audiologists. Coefficients of correlation for discrimination tests ranged from .83 to .92. Aided speech reception thresholds were less consistent with correlations ranging from .48 to .68.—M. F. Palmer.

3060. Pickett, J. M., & Rubenstein, H. (Operational Applications Office, USAF Command and Control Development Division) **Perception of consonant voicing in noise.** *Lang. Speech*, 1960, 3, 155-163.—"Measurements are reported of the perception in noise of the occurrence of voicing in the English consonants /p, b, t, d, f, v, s, z/. The listeners' task was to report whether the consonant spoken was of the class /b, d, v, z/ (voiced) or of the class /p, t, f, s/ (unvoiced). The factors investigated were (1) the position of the consonant in the test utterance . . . (2) the place of articulation . . . (3) the degree of occlusion . . . and (4) the spectrum of the masking noise. . . . The absence of voicing was perceived better in alveolar consonants than in labials in low-frequency noise. Otherwise there was no large effects" of the other variables.—A. E. Horowitz.

(See also Abstract 3720)

#### SPEECH & LANGUAGE

3061. Fónagy, I., & Magdics, K. (Hungarian Academy Science) **Speed of utterance in phrases**

**of different lengths.** *Lang. Speech*, 1960, 3, 179-192.—The length of a phrase in Hungarian is defined by a single stress-pitch contour. Speed of utterance was found to depend on length of phrase; the shorter the phrase, the slower the speed. This dependence can be expressed by exponential functions with a steep slope at roughly the point between phrases of 3 and 4 syllables length. The particular function varies with the type of material spoken; poetry, prose, conversation, and lecture material. This relation was found to be independent of regularities in breathing.—A. E. Horowitz.

3062. Hargreaves, W. A. (Langley Porter Neuropsychiatric Inst.) **A model for speech unit duration.** *Lang. Speech*, 1960, 3, 164-173.—"A version of the exponential decay process is advanced as a mathematical model for speech unit durations. Distributions of speech unit durations are reported from a variety of speech samples. It is argued that a simple exponential model provides a workable approximation to these distributions. A more exact model is also outlined which takes account of (1) the fact that extremely short speech units lasting only a small fraction of a second are relatively less likely to occur, and (2) the fact that there tend to be small shifts in expected speech unit duration within a particular speech sample."—A. E. Horowitz.

3063. Pollack, I., Rubenstein, H., & Horowitz, A. (Operational Applications Office, USAF Command and Control Development Division) **Communication of verbal modes of expression.** *Lang. Speech*, 1960, 3, 121-130.—4 untrained speakers read sentences with no emotional content in various "expressive modes," i.e., surprise, boredom, pomposity, etc. "Listeners attempted to identify the intended mode of expression drawing their responses from a limited number of alternatives. Results are presented showing how the identification of modes of expression is affected by: (1) number of response alternatives, (2) noise, (3) whispering, and (4) temporal sampling. Reasonably high levels of performance may be achieved under conditions of reduced acoustic information."—A. E. Horowitz.

3064. Thomas, H. B. G. (University Coll. Hosp., London, England) **"Strategy" in the spontaneous utterance of number symbols.** *Lang. Speech*, 1960, 3, 235-244.—"This paper discusses the possible significance of different 'strategies,' that is of different distribution functions, in the utterance of certain language units. Two samples of the utterance of numbers are analyzed and found to exhibit a given strategy. The existence of such strategies has implications with respect to the capacity of the brain for handling both semantic and statistical information."—A. E. Horowitz.

3065. Uldall, E. (U. Edinburgh, Scotland) **Attitudinal meanings conveyed by intonation contours.** *Lang. Speech*, 1960, 3, 223-234.—"Osgood's semantic differential was used to measure the attitude of listeners to a variety of intonation patterns. 16 pitch contours were applied by synthesis to recordings of four sentences and listeners were asked to rate the patterns with respect to 10 scales. . . . it was possible to draw some conclusions about the relative effectiveness of the chosen scales and about some general features of the intonations patterns."—A. E. Horowitz.

3066. Wang, W. S-Y., & Crawford, J. (U. Michigan) Frequency studies of English consonants. *Lang. Speech*, 1960, 3, 131-139.—". . . an explanation was sought for the disagreement among the various frequency counts which have been made of English consonants. The data for a set of ten different frequency counts were converted to IPA symbols and compared by means of the coefficient of linear correlation. It was found that the relative frequency of consonants in English is not seriously affected by the style of literary content or by the dialect of the sample and that a relatively small sample yields typical values. Differences in the general type of corpus (dictionary or running texts) and in transcription, however, cause significant discrepancies among the various studies.—A. E. Horowitz.

(See also Abstract 3380)

#### PSYCHOMOTOR TASKS

3067. Chatterjea, R. G. (Calcutta U., India) Relation between temporal interval and reaction time. *Psychologia*, 1959, 2, 178-182.—Data was collected from experiments in which Ss estimated short stimulus intervals. Reaction time to light bulb stimulus was taken for motor, sensory, discriminative, and choice-type responses. Accuracy of interval elapsed corresponded to different form of reactions as measured by reaction time; thus accuracy and alertness were related.—D. Bryan.

3068. Creamer, Lyle R., & Trumbo, Don A. (Kansas State U.) Multifinger tapping performance as a function of the direction of tapping movements. *J. appl. Psychol.*, 1960, 44, 376-380.—What can the study of finger movements in typing, especially with respect to directional aspects, tell us about the way in which office and data-processing machine keying operations can be improved? "Five male Ss were given 3-minute trials at each of five keyboard positions for 20 consecutive days. The keyboard, consisting of the eight keys of the starting position of a typewriter, was hinged in the middle, so that the direction of tapping movements, could be varied from horizontal to vertical. The task was a simple alternation of both fingers and hands." Relatively poor performance with the standard horizontal keyboard and other findings suggest the possibility of much improved keyboards.—J. W. Russell.

3069. Ellis, H. C., & Ahr, A. E. (U. New Mexico) The role of error density and set in a vigilance task. *J. appl. Psychol.*, 1960, 44, 205-209.—To study ability to detect certain signals while persistently looking for them, 216 students were involved in proofreading tasks. Results were sought pertaining to error detection as a function of error density, false detections at various error levels, influence of previous density on present detection, and false detections after shifts in error density. All vigilance tasks may be subject to decreasing efficiency at extremely high error levels.—J. W. Russell.

3070. McConnell, David, & Shelly, Maynard W. (Ohio State U.) Tracking performance on a sequence of step functions which approaches a continuous function as a limit. *J. exp. Psychol.*, 1960, 59, 312-320.—The relation between error in tracking a continuous function and error in tracking a discrete function which approaches the continuous func-

tion was studied. As the number of steps is increased, the error measured with the discrete targets approached that associated with the limiting continuous target. S, it is concluded, minimizes the error by leading the target, especially during flexion of the control arm.—J. Arbit.

3071. McConville, Carolyn B. (199 Harrison St., Princeton, N.J.) Handedness and psychomotor skills. *J. develope. Read.*, 1960, 4, 47-52.—In a sample of 110 Purdue elementary psychology students it was shown that no statistically significant differences exist between handedness, reading test scores, and reaction times.—J. R. Kinzer.

3072. Mukherjee, B. N. Reliability estimates for a modified two-hand coordination test. *Percept. mot. Skills*, 1960, 11, 13-14.—Several reliability estimates for a 2-hand coordination task are presented: odd-even time, odd-even errors, odd-even halves, and test-retest. These range from .71 to .90.—C. H. Ammons.

3073. Peters, W. (Leistenstrasse 27, Wuerzburg, Germany) Ein Lern-Apparat. [A learning apparatus.] *Psychol. Beitr.*, 1960, 4, 98-109.—The apparatus is designed to measure the learning of a sequence of hand movements that lead from a certain point via a number of diversions to a "target point." The construction is simple: 2 rows of 20 screws are connected with a green and a red light signal that flash up whenever the S touches the right or wrong screw. Results of several experiments are illustrated. (English & French summaries)—H. J. Priester.

(See also Abstracts 3049(a), 3082, 3090, 3289, 3291, 3297, 3310, 4066, 4137, 4183, 4207(a), 4213, 4216, 4230)

#### MOTIVATION & EMOTION

3074. Easterbrook, J. A. The effect of emotion on cue utilization and the organization of behavior. *Psychol. Rev.*, 1959, 66, 183-201.—Emotion reduces utilization of cues. In some tasks this can be an advantage (elimination of irrelevant cues); more often, however, such reduction inhibits performance. Attentive behavior fits into the framework of this theory. It can also be easily translated into terms of information theory allowing a qualitative evaluation of task difficulty.—W. J. Koppitz.

3075. Fujita, B. (U. Washington) The chair-stabilometer: An instrument for measuring gross bodily activity. *Dissertation Abstr.*, 1960, 21, 1636.—Abstract.

3076. Jones, M. R. (Ed.) Nebraska symposium on motivation. Vol. VIII. Lincoln, Neb.: Univer. Nebraska Press, 1960. xi, 268 p. \$4.25.—An introduction by the editor and 6 papers as follows: R. G. Barker, "Ecology and Motivation"; D. W. Taylor, "Toward an Information Processing Theory of Motivation"; Walter Toman, "On the Periodicity of Motivation"; R. W. White, "Competence and the Psychosexual Stages of Development"; Fritz Heider, "The Gestalt Theory of Motivation"; David Rapoport, "On the Psychoanalytic Theory of Motivation." Also included are comments by the participants on each other's papers.—C. T. Morgan.

3077. Lykken, David T. (U. Minnesota) The validity of the guilty knowledge technique: The effects of faking. *J. appl. Psychol.*, 1960, 44, 258-

262.—In developing an alternative to the lie detector, a questionnaire was given 20 Ss with the GSR. 1 response in each multiple-choice item was a guilty response known to the examiner. Ss were bribed to defeat the GSR after being trained to do so. They failed. Although conventional methods may be used in more instances, this objectively scored, guilt knowledge test offers a valuable alternative.—J. W. Russell.

3078. Pfaffmann, Carl. (Brown U.) **The pleasures of sensation.** *Psychol. Rev.*, 1960, 67, 253-268.—A discussion of the "different roles of stimuli and sensory processes in the behavioral economy of the organism." Traditionally "sensory processes were studied largely in relation to discrimination or so called cognitive functions. But stimuli have been shown to have other neural and behavioral functions as arousal and reinforcement." There is "increasing support for the idea that gustatory stimulation per se is capable of eliciting and reinforcing behavior in its own right. . . . Finally, I speculated as to the psychophysiological mechanisms that might underlie reinforcement and the affective responses to sensory stimuli. My basic theme has been that sensory stimulation 'qua stimulation' plays a significant role in the motivation as well as guidance of behavior." (74 ref.)—C. T. Morgan.

3079. Shurley, Jay T. (U. Oklahoma School Medicine) **Profound experimental sensory isolation.** *Amer. J. Psychiat.*, 1960, 117, 539-545.—Modification of an immersion technique for sensory deprivation is described and a condensed narrative account of one S's experience and a summary of selected data derived from many Ss is presented.—N. H. Pronko.

3080. Traxel, W. (U. Marburg, Germany) **Ueber die Bestimmung der Affektbetonung verschiedener Erlebnisinhalte.** [The assessment of the affective load of experience.] *Psychol. Zeit.*, 1960, 4, 146-159.—Possibilities of applying the psychogalvanic reaction in order to measure the affective load of experience are illustrated. Results of the experiments show that measuring the psychogalvanic reaction is a workable method. (11 ref. English & French summaries)—H. J. Piester.

3081. Ueda, Toshimi. (Nara Gakugei U., Japan) [A study of anger in Japanese college students through the controlled diary method. I.] *J. Nara Gakugei U.*, 1960, 9(1), 21-28.—317 college students, mostly freshmen, kept nightly diaries of all instances of anger. The average number of angers reported per week was 5.06 for men and 5.53 for women, ranging from 0 to 26 for men and 1 to 18 for women. The cause of anger in 73% of the cases was persons; 8%, institutional factors; 4%, personal inadequacies; and 14%, objects and incidents. Sizable sex differences were found for all of these except for personal inadequacies. (English summary)—C. T. Morgan.

(See also Abstracts 2983, 3285, 3528, 3769, 3845)

#### LEARNING & MEMORY

3082. Abbey, D. S. **Ability and performance on a complex perceptual-motor task.** *Percept. mot. Skills*, 1960, 11, 55-56.—"Performance on the standard task of the Toronto Complex Coordinator for four groups of Ss, differing in initial ability, was

analyzed. Both the slope and rate of change of the learning curve were related to initial level of ability. Improvement per trial (over a 10-min. practice period) was inversely related to level of performance during the first minute."—C. H. Ammons.

3083. Berry, R. N. **Incompatibility between response to verbal stimulation and recovery from exertion.** *Psychol. Rep.*, 1960, 7, 55-56.—"Results indicate that different reinforcing events do not differentially affect the following performance in the case where the reinforcing events occur simultaneously with the immediate reaction (i.e., fatigue) to the task. This is interpreted as being the result of the incompatibility of responses to the task and responses to the reinforcing event."—C. H. Ammons.

3084. Bullock, Donald H. (Institute Pennsylvania Hosp.) **Some aspects of human operant behavior.** *Psychol. Rev.*, 1960, 10, 241-258.—"The characteristics of free operant response situations have been described and illustrations presented of various aspects of operant behavior in human subjects, including (a) the performances of pigeons and humans under comparable multiple schedule conditions, (b) the effects of the experimenter's presence, (c) the effects of different reinforcers, (d) psychopathologic influences, and (e) psychopharmacologic influences." The material is discussed in relation to "the conception that present voluntary responses reflect the effects of past experiences, or learning."—R. J. Seidel.

3085. Champion, R. A. **Reinforcement and learning theory.** *Aust. J. Psychol.*, 1960, 12, 10-20.—The identification of reinforcement with drive-reduction is regarded as unwarranted and misleading. Various other concepts of reinforcement are discussed, and the author indicates his preference for treating reinforcement as "that which strengthens." Such an approach "begins with a truly empirical law of effect."—P. E. Lichtenstein.

3086. Chapman, Jean P. (Northwestern U.) **The spacing of sequentially dependent trials in probability learning.** *Dissertation Abstr.*, 1960, 21, 1635.—Abstract.

3087. Edelman, S. K. (Purdue U.) **Analysis of some stimulus factors involved in the associative response.** *Dissertation Abstr.*, 1960, 21, 1630.—Abstract.

3088. Estes, W. K. (Indiana U.) **Learning theory and the new "mental chemistry."** *Psychol. Rev.*, 1960, 67, 207-223.—". . . in virtually all contemporary learning theories, the concept of strength is assumed to have at least three different empirical manifestations—the habit hierarchy, the growth of associative strength in the sense of response probability as a function of number of reinforcements, and the increase in resistance to forgetting of once established associations with additional reinforcement. We tested for all three of these effects by means of the simplest controlled comparisons we could arrange, doing our utmost to eliminate the confoundings and the layers of statistical processing that shield the behavioral changes occurring on individual learning trials completely from view in conventional experimental designs. And under these presumably favorable circumstances, all three effects mysteriously evaporated, leaving a picture of unitary associations

the learning and unlearning of which proceed on an essentially all-or-none basis." (20 ref.)—C. T. Morgan.

3089. Eysenck, S. B. G. (U. London, England) **Retention of a well-developed motor skill after one year.** *J. gen. Psychol.*, 1960, 63, 267-273.—8 Ss practiced on the pursuit rotor during 50 15-minute periods; they were retested for 3 15-minute periods after 1 year's rest. There was a 37% decrement during the first 50 seconds' performance after rest. Performance on the whole of Trial 51 showed a decrement of 10%; on subsequent trials performance showed no decrement at all but was in fact slightly superior to pretest performance. On Trial 51 there is a much longer and steeper warm-up, and there is a significant tendency for performance on Trials 52 and 53 to decline, after the original warm-up, at an earlier period than during Trial 50. All in all the results support the prediction that retention of a perceptual-motor habit is remarkably good, even after 1 year's rest.—*Author abstract.*

3090. Hunt, Wilson L. (VA Hosp., Canandaigua, N.Y.) **Anxiety as drive and reactive inhibition.** *J. gen. Psychol.*, 1959, 61, 159-167.—"It is hypothesized that the effect of anxiety on learning is a function of task difficulty and the degree of distribution of practice. An experimental design is suggested for the testing of this hypothesis."—H. Ruja.

3091. Kankleit, Otto. (Hamburg, Germany) **Das Unbewusste als Keimstätte des Schöpferischen: Selbstzeugnisse von Gelehrten, Dichtern und Künstlern.** [The unconscious as germinating place of the creative: Testimonies of scientists, poets and artists.] Munich, Germany: Ernst Reinhardt, 1959. 192 p. DM 11.00.—37 physicians, psychologists, mathematicians and researchers; 27 writers and poets; 6 architects, painters and sculptors; and 9 actors, conductors, and composers replied to a questionnaire inquiring about: (a) the consciously set up conditions favoring their intellectual activities; (b) the extent and kind of unconscious material entering into their creations; (c) special states of mind noticed by them at the beginning of a new creative period and during which the unconscious took the lead temporarily; (d) their use of stimulants or means for concentration, e.g., coffee, music, meditation; (e) the influence of dreams, images and memories on the creative process; (f) extraordinary experiences independent of the creative process; and (g) this process itself to be described on the basis of an example. Further answers to these questions are supplied from the literature.—L. W. Brandt.

3092. McGuigan, F. J. **Variation of whole part methods of learning.** *J. educ. Psychol.*, 1960, 51, 213-216.—The purpose of this study was to test the hypothesis (within limits) that the larger the unit practiced, the better the performance, and to study the effect of varying experimenters. The Kohs Block Design, Number XVII was used as learning material. 4 methods which varied from whole to incomplete whole, very incomplete whole to part were used. 9 experimenters ran 72 Ss, a total of 8 Ss each. The results showed in general that the larger the practice unit, the better the performance. A theory is proposed that this superiority of the whole method may be due to distributed practice. Results showed

that the varying effects of the experimenters did not lead to significant differences.—W. E. Hall.

3093. Mowrer, O. Horbart. **Learning theory and behavior.** New York: Wiley, 1960. xiv, 555 p. \$6.95.—A revised conditioning theory of learning is presented, postulating 2 kinds of reinforcement: punishment or incremental reinforcement, and reward or decremental reinforcement—both of them manifesting secondary as well as primary forms. Active avoidance learning takes place on the basis of pain (primary-drive increment) or of threat, or of disappointment (both forms of secondary-drive increment). Passive avoidance learning (i.e., response inhibition) ensues if response-correlated stimulation is followed by any of these incremental reinforcements. Similarly, if an external stimulus is followed by drive decrement, either primary or secondary (for the latter, relief or hope), then the stimulus acquires the capacity to attract or hold the S to or near itself (active approach behavior). Reward sets up a feedback of fear-reduction or hope. Habit formation is the conditioning of this secondary reward, hope, to the stimuli (tactile, proprioceptive, etc.) aroused by successful instrumental response. Learning is related, exclusively, to the connections involved in the informational feedback from a response or response "intention" and it involves no change in brain-to-muscle pathways. The crucial problem of response selection and initiation (which is said to be cognitive) is postponed to a companion volume (see 35: 1680).—H. B. English.

3094. Toch, H. H. **Can eye dominance be trained?** *Percept. mot. Skills*, 1960, 11, 31-34.—"An attempt was made to temporarily modify eye dominance through training. A series of 10 stereograms was developed in which one of the two monocular fields strongly predominated over the other. Training consisted of consecutive stereoscopic presentations of these slides, with the dominant field always to the left eye. Total viewing time was 10 min. A control group was presented with stereograms which produced composite images. Eye dominance was measured before and after viewing in both groups. The pre-tests showed a tendency toward right eye dominance. This tendency was not present in the post-tests, but neither was there a detectable difference between the two groups. The negative finding was discussed in terms of two alternative explanations, related to premises concerning the nature of eye dominance."—C. H. Ammons.

3095. Van der Meer, H. C. **The influence of instruction in a two-choice probabilistic learning task under partial reinforcement.** *Acta psychol. Amst.*, 1960, 17, 357-376.—Flood's assumption that the more frequent event would be chosen in 100% of the trials if S is convinced that a sequence of alternative events is generated by a stationary response is challenged by experimental test. The alternative hypothesis: a difference in instructions would influence behavior with regard to at least 2 factors, a difference in variability in the predictions and a difference in motivation were tested in a 2-choice situation.—G. Rubin-Rabson.

3096. Witte, W. (U. Tuebingen, Germany) **Mnemische Determination und Dynamik des reproduktiven Tatonnements.** [Mnemonic determination and the dynamics of reproductive tatonnement.]



*Psychol. Beitr.*, 1960, 4, 179-205.—Hypotheses for the dynamics of reproductive tatonnement are discussed. The name that comes first to the mind in reproductive tatonnement is practically exclusively mnemically determined. However, not only by the single aspect of the name of which the Ss try to think. It is also determined by its respective "area" sensu Koehler and von Restorff. Similarity areas in rhythm and sound having a more or less unique Gestalt are easily thought of and remembered. Individualizing differentiation finds the dominating Gestalt. (English & French summaries)—H. J. Priester.

3097. Zinchenko, V. P., Lomov, B. F., & Ruzskaya, A. G. *Sravnitel'nyi analiz osyazaniya i zreniya*. [A comparative analysis of touch and sight.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, 5, 71-74.—The authors hold against many Soviet psychologists that visual and (at least, to a limited extent) tactile perceptions may occur not only in a successive but also in a simultaneous manner. This happens particularly at the end of perceptual learning when the object can be recognized almost instantaneously on the basis of few "points of support." Through learning, the successive perceiving of an object is reduced to the point of becoming "a simultaneous grasping."—A. Cuk.

(See also Abstracts 2928, 2929, 3293, 3295, 3404, 3499, 3757)

#### Conditioning

3098. Blaylock, J. J. (State U. Iowa) **Verbal conditioning performance of psychopaths and non-psychopaths under verbal reward and punishment.** *Dissertation Abstr.*, 1960, 21, 1628.—Abstract.

3099. Grant, David A., McFarling, Calvin, & Gormezano, Isidore. (U. Wisconsin) **Temporal conditioning and the effect of interpolated UCS presentations in eyelid conditioning.** *J. gen. Psychol.*, 1960, 63, 249-257.—Eyelid conditioning was investigated in 120 human Ss in a trifactorial experiment as a function of constant versus variable time interval between trials, both in acquisition and extinction, and the interpolation of 20 trials with the UCS alone during acquisition. The principal findings were that: (a) CS-UCS trials were more effective than UCS alone in producing resistance to extinction; a similar result for acquisition was not statistically significant. (b) Variation in the intertrial interval produced no difference in acquisition, but shift from variable to constant intertrial interval from acquisition to extinction and vice versa resulted in greater resistance to extinction which could be interpreted as evidence for temporal conditioning.—Author abstract.

3100. Grings, William W. (U. Southern California) **Preparatory set variables related to classical conditioning of autonomic responses.** *Psychol. Rev.*, 1960, 67, 243-252.—"A set of operations for inferring the existence of a preparatory set variable in human autonomic conditioning has been introduced and described. Termed a perceptual disparity response it is defined as the difference in magnitude of response between situations where receipt of stimulation following a signal cue is in accord with past

experience and where receipt of stimulation is not in accord with past experience with the particular cue. Experimental data demonstrating the disparity variable are presented." (19 ref.)—C. T. Morgan.

3101. Il'ina, G. N. **Usloviye fotokhimicheskie refleksy s efektom povysheniya svetovoi chuvstvitel'nosti.** [Conditioned photochemical reflexes evoking an increase in the light sensitivity.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, 5, 93-95.—Under special conditions it is possible to condition Ss to react with an increased sensitivity to light. In this study 7 Ss were used. The CS was "sound, the UCS was increase and decrease in illumination. The CR was obtained with difficulty and was very unstable.—A. Cuk.

3102. Walker, Evelyn G. (U. Illinois) **Eyelid conditioning as a function of intensity of conditioned and unconditioned stimuli.** *J. exp. Psychol.*, 1960, 59, 303-311.—2 groups of 20 male Ss each were run under the 4 combinations of weak and strong UCS and CS. The results support that part of Hull's stimulus-dynamism principle postulating an effect of CS intensity upon response strength, but provide no evidence of an effect of CS intensity on learning as distinct from performance. (20 ref.)—J. Arbit.

(See also Abstract 3768)

#### Discrimination

3103. House, Betty J., & Zeaman, David. (U. Connecticut) **Transfer of a discrimination from objects to patterns.** *J. exp. Psychol.*, 1960, 59, 298-302.—2 different sequences of easy-to-hard discrimination trials were compared for efficiency with a training sequence of hard discrimination trials only. Ss were groups of mentally retarded children. Both easy-to-hard sequences were more efficient than the series of hard-discrimination trials only as measured by total trials to learn the hard discrimination. The implications of these results for Restle's discrimination model and Wyckoff's theory of observing responses is discussed.—J. Arbit.

3104. Iwahara, Shinkuro. (Nara Women's U., Japan) **Studies in spontaneous alternation in human subjects: III. A developmental study.** *Jap. psychol. Res.*, 1959, 1(8), 1-8.—In Experiment I, Ss were asked to press either the right or the left key. If the right key was pressed, the red light was on, and if the left key was pressed, the green light was lit. Ss were told that 1 of the 2 responses was correct but it was changed from trial to trial. No information was given of their results. Spontaneous choice alternation was found to decrease slightly from 0'- to 30'-intertrial intervals for children but no such tendency was shown for adults. However, alternation behavior decreased considerably with greater intertrial intervals for both age groups and adults indicated consistently less alternation than children. The results were explained by inhibition and position preference. Experiment II was conducted to test the effect of similarity of choice objects on response alternation. As was predicted from satiation (stimulus inhibition) theory, alternation tendency was found to be greater when the 2 objects were differently colored than when they were similarly colored.—S. Iwahara.

3105. Tyler, V. O., Jr. (U. Nebraska) **An experimental test of the concept of sensory integration.** *Dissertation Abstr.*, 1960, 21, 1639.—Abstract.

(See also Abstracts 3245, 3248, 3783)

#### Verbal Learning

3106. Bourne, L. E., Jr., & Long, L. Donald. (U. Utah) **Performance in a verbal conditioning situation as a function of shifts in reinforcement ratio.** *J. gen. Psychol.*, 1960, 63, 211-218.—375 college students served as Ss. Each trial consisted of the presentation of a signal light followed on a certain percentage of the trials by the onset of an information light; S indicated, upon the occurrence of the signal light, his prediction as to whether the information light would appear. All Ss were given a total of 100 trials; 60 at one reinforcement ratio, 40 after a shift to a second ratio. Terminal response probabilities in most conditions matched the experimentally determined reinforcement ratio, and the learning rates for preshift performance were comparable. The assumption that the learning rate would not differ in the 2 series for any group was not tenable unless the theory was modified to accept a surprise phenomenon occurring whenever S experienced a change from continuous reinforcement.—*Author abstract.*

3107. Bousfield, W. A., Whitmarsh, G. A., & Berkowitz, H. (U. Connecticut) **Partial response identities in associative clustering.** *J. gen. Psychol.*, 1960, 63, 233-238.—A stimulus word typically elicits responses of 2 types: (a) a verbal representational response which may be labelled as the word itself, (b) a group of verbal associational responses whose relative strengths may be assessed from free associational norms. These assumptions lead to the derivation of a measure of word relatedness. This measure, independently derived by Cofer and designated by him as the mutual frequency score, is the percentage of the 2 types of verbal responses elicited in common by 2 stimulus words. Evidence of the validity of the mutual frequency score is found in an obtained positive correlation between such scores for word pairs and the incidence of the associative clustering of these pairs in their free recall following their randomized presentation in a stimulus word list.—*Author abstract.*

3108. Chansky, Norman M. (Columbia U.) **Preexamination stress, information schedules, and learning.** *J. gen. Psychol.*, 1960, 63, 219-228.—A study was made to explore the effects of stress and of schedules of information on the learning of paired associate nonsense syllables. 60 college freshmen on probation were Ss. Each S was tested individually. He was given 1 of 4 treatments: (a) stress-continuous information, (b) stress-intermittent information, (c) nonstress-continuous information, (d) nonstress-intermittent information. Stress was induced by telling Ss that they were taking an intelligence test. The results indicated that stress per se had no effect on learning. In contrast to intermittent information, under continuous information faster acquisition but inferior retention were noted. Stress together with continuous information resulted in slow acquisition and poor retention. Together with intermittent information, stress resulted in rapid ac-

quisition and stable retention. The findings were explained in terms of the experimental design.—*Author abstract.*

3109. Hall, William E. (Child Guidance Clinic Central Connecticut, Meriden) **The effects of set and reinforcement in verbal conditioning.** *J. gen. Psychol.*, 1960, 63, 239-248.—The purpose of this study was to investigate the effects of instructional set, intensity of reinforcement, and sex of the Ss on verbal conditioning. The set was varied in 3 ways: (a) Ego-orientation, (b) Task-orientation, and (c) No-orientation instructions. The intensity of reinforcement was also varied in 3 ways: (a) "Good," (b) "Mm-Hmm," and (c) no reinforcement. Following the first 200 trials administered to all Ss, the instructional sets were introduced and the remaining 100 trials administered. Ss were reinforced every time a "critical" pronoun was chosen. The amount of conditioning obtained was a function of the instructional set and the intensity of reinforcement, but was not related to the sex of the Ss.—*Author abstract.*

3110. Hartman, Thomas E., Beeman, Ellen Y., & Grant, David A. (U. Wisconsin) **The correlation of post-rest recovery in verbal and motor learning.** *J. gen. Psychol.*, 1960, 63, 199-202.—44 right-handed men practiced on the pursuit rotor and learned 4 lists of nonsense syllable. A rest was inserted in each task. No relation was found between post-rest recovery in the 2 types of tasks, and the common variance between verbal and motor recovery is concluded (at the 5% level) to be less than 8%. This indicates that no single consistent process underlies these 2 recovery phenomena.—*Author abstract.*

3111. Rozov, A. I. **O nepravilnostyakh v pripominanii: Soobshchenie II. Oshibki v pripominanii.** [Irregularities in remembering: Communication II. Mistakes in remembering.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, No. 6, 71-73.—Analysis of mistakes made by a group of 35 students of upper grades when learning lists of English words. Both the method of recall and recognition were used. It is stressed that no mistakes are coincidental but are based on dynamic factors. Among these factors are verbal similarity, same meaning, analogy, contiguity, and several factors of a more subjective character. They are operative both singly and in combination.—*A. Cuk.*

3112. Salzinger, Kurt. (State Dept. Mental Hygiene, N.Y.) **Experimental manipulation of verbal behavior: A review.** *J. gen. Psychol.*, 1959, 61, 65-94.—Research on verbal behavior is reviewed under the categories: the response; type, amount, delay, schedule, and number of reinforcement(s); awareness of conditioning; type of discriminative stimulus; reinforcement history of the individual; and states of the individual. (107-item bibliogr.)—*H. Ruja.*

3113. Underwood, B. J., & Schulz, R. W. (Northwestern U.) **Meaningfulness and verbal learning.** New York: J. B. Lippincott, 1960. vi, 430 p. \$6.50.—The authors report a series of original studies and analyze previous work in the area. "... the position is taken that the frequency with which verbal units have been experienced is the fundamental variable responsible for the characteristics which

have been used to define meaningfulness." The implications of the frequency hypothesis were tested in 16 experiments. These experiments deal with the effects of the frequency of letters and letter-combinations on serial and paired-associate learning, the effect of "pronunciability" on learning, the effect of frequency on letter-sequence habits, and the difference in the effect of the meaningfulness of a word depending on whether the word is a stimulus or a response.—E. G. Heinemann.

(See also Abstracts 3244, 3247, 3344)

#### Retention & Forgetting

3114. Asch, Solomon E., Ceraso, John, & Heimer, Walter. (Swarthmore Coll.) **Perceptual conditions of association.** *Psychol. Monogr.*, 1960, 74(3, Whole No. 490), 48 p.—An investigation of the functional connections between stimuli that are related in a variety of ways that affect association. Using visual stimuli selected in such a manner as to allow variation in 2 properties (form and mode), the investigators then compared the functional connections between the stimuli in a series of experiments that permitted variance in these relationships. The criterion measurement was the ability of the Ss to recall the basic stimulus figures on presentation of cues. The ability of the Ss to recall the parts of a stimulus distribution was found to be related to the unit properties of the stimulus and coherence of recall. While total level of recall of form and mode properties of the stimulus figures was essentially the same with unitary (figures whose form and mode both vary) or nonunitary (figures which vary in form but paired with the modal components of the unitary figure), the accuracy of joint recall was substantially increased when the unitary figures were to be recalled as against the nonunitary pair. This experimental study affords a different approach to the perceptual factors involved in association theory.—M. A. Seidenfeld.

3115. Ehrlich, Stephane; Flores, Cesar, & Le Ny, Jean-Francois. **Rappel et reconnaissance d'éléments appartenant à des ensembles définis.** [The recall and recognition of elements belonging to a definite totality.] *Annee psychol.*, 1960, No. 1, 29-37.—In a memory experiment, after a 2-min. delay, a series of 10 3-figure numbers from a list of 40 numbers were presented orally to some students; 2 groups of Ss who were aware that the 10 stimuli were drawn from the list of 40 numbers, gave very similar results for recall and for recognition. A group of Ss unaware of this fact likewise show a very similar performance for recall. It would seem that one of the factors involved in the large difference usually found between recall and recognition is the fact that in the 1st situation the S has to find the right response from amongst a wide range of elements, while in the 2nd situation he has to recognize this response in a much more limited number of elements.—L. A. Waack.

3116. Eysenck, H. J. **Reminiscence as a function of rest, practice, and personality.** *Percept. mot. Skills*, 1960, 11, 91-94.—"Reminiscence scores on the pursuit rotor were obtained from 240 adolescents, and were shown to be a function of duration of practice, duration of rest, and degree of extraversion-introversion."—C. H. Ammons.

3117. King, David J., & Schultz, Duane P. (American U.) **Additional observations on scoring the accuracy of written recall.** *Psychol. Rec.*, 1960, 10, 203-209.—Recall of stories read 3, 4, or 5 times to 6 groups of Ss scored by 7 different methods. Intercorrelations of measures subjected to factor analysis yielded 2 factor solution. Results indicated that length was one and the other was "a variable factor . . . probably a complex function of . . . degree of learning and the nature of the learned material."—R. J. Seidel.

3118. Rozov, A. I. **Nepravil'nosti v pripominanii: Soobshchenie I. Zameny v vosproizvedenii.** [Irregularities of recall: Communication I. Substitutions in the reproduction.] *Dokl. Akad. Pedag. Nauk RSFSR*, 1959, 5, 67-70.—Ss were 22 students of the 10th grade who had to learn lists of 15 sentences. The lists were reproduced 4 times at different periods of time ranging between 1 hour to 3 months. The substitutions which occurred in the reproduction were analyzed under the aspect of their dynamics (type of substitutions) and under the aspect of deviation from the correct words. The author opines that none of the traditional theories are able to account for all the findings. The substitutions cannot be explained in terms of traces or associations but only in terms of the whole process of recall during which S "can choose indiscriminately any words and expressions which appear to the Ss as similar and equivalent although objectively of different meanings."—A. Cuk.

3119. Sinha, A. K. P., & Pandey, C. B. P. (Patna, India) **An experimental study of learning and recall of words of sexual and non-sexual meaning.** *Indian J. Psychol.*, 1958, 33, 165-170.—20 undergraduates learned French equivalents for 16 English words of sexual meaning and 16 English words of nonsexual meaning. Both learning and recall of words of sexual meaning were inferior to those of words of nonsexual meaning ( $p = .001$ ). The results are regarded as supporting the Freudian concept of repression.—C. T. Morgan.

#### PROBLEM SOLVING & THINKING

3120. Bayard, Jean. (4824 Emblem Dr., Pittsburgh, Pa.) **A model dealing with degrees of consciousness.** *J. gen. Psychol.*, 1959, 61, 137-150.—"An imaginary nervous system is presented in terms of centers of communication. . . . Rules describing the organization of messages . . . are postulated. The parts of the system are tentatively linked to observable variables. . . . A number of testable hypotheses are presented which appear to derive from the way the system works and the manner in which it is defined."—H. Ruja.

3121. Maltzman, Irving. (U. California, Los Angeles) **On the training of originality.** *Psychol. Rev.*, 1960, 67, 229-242.—"A series of experiments by Maltzman and his associates was reviewed, and a procedure which consistently facilitated originality was described. This procedure involves the repeated presentation of a list of stimulus words in a modified free association situation accompanied by instructions to give a different response to each stimulus. Under these conditions the responses become more uncommon. When presented with new stimulus materials,

Ss receiving such training are reliably more original than Ss receiving no training." (38 ref.)—C. T. Morgan.

3122. Sampson, H., & MacNeillage, P. F. Temporal integration and the serial addition paradigm. *Aust. J. Psychol.*, 1960, 12, 70-88.—A paced serial addition task was used in an experimental approach to the problem of temporal integration and the syntax of action. 2 hypotheses are suggested which were supported by the results of 8 typical experiments: 1) "the initial breaks in integrated response sequences occur because a 'directive' (a neurological organization necessary to fulfil task demands) regresses towards randomness with respect to the demands of the particular task as a function of task duration with rate of regression a function of pacing rate, and 2) a variable background of nonspecific stimulation is required to sustain temporally integrated behaviour."—P. E. Lichtenstein.

(See also Abstract 3356)

#### Problem Solving

3123. Henle, M. On error in deductive reasoning. *Psychol. Rep.*, 1960, 7, 80.—"Graduate students of psychology (N = 46) were asked to evaluate the logical adequacy of deductions presented in the context of everyday problems. . . . The results suggest that when a person arrives at apparently incorrect conclusions, it is often because he is reasoning from premises different from those intended. The frequency of error in making logical inferences may be less than is often assumed; and in the light of the present study, the assumption that deductive thinking follows a logic qualitatively different from Aristotelian logic seems to be gratuitous. These findings may be relevant not only to the problem of the nature of error, but also to that of the relation of logic to thinking and to such specific issues as the influence of attitudes on cognitive processes."—C. H. Ammons.

3124. Matiushkin, A. M. Ob usloviyach voznikoveniya analiza. [Conditions determining the origin of analysis.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, 5, 63-66.—35 Ss were asked to measure the capacity of a container partially filled with water. The shape of the container was quite irregular, partly cylindrical and partly spheric. Ss were questioned about the way followed in solving this problem. The thinking process was analyzed and found to pass through 3 stages. In the first stage, S tries to solve the problem by means of old methods and formulae. In the second, he becomes aware of "the problem situation" and of the inadequacy of old methods of operation. In the final, he discovers new aspects in the situation which give a new meaning to the problem and lead to a new solution.—A. Cuk.

3125. Parida, G. (Cuttack, India) Thinking as problem solving: A gestalt standpoint. *Indian J. Psychol.*, 1958, 33, 157-163.—A review of the ideas of gestalt psychologists such as Wertheimer, Köhler, Koffka, and Lewin.—C. T. Morgan.

3126. Rimoldi, H. J. A. (Loyola U.) Problem solving as a process. *Educ. psychol. Measmt.*, 1960, 20, 449-460.—Traditionally, psychological measurement has been concerned with product rather than process. A procedure for analyzing the problem solving process is described. It entails providing

the S a brief statement of a problem and a set of questions on cards from which he selects those he considers necessary to ask. Quantitative information such as the number of questions asked, frequency a given question is asked, order in which questions are asked, categories of questions asked, and time taken to complete the test. The application of this approach in the training of medical students is discussed. The evidence adduced indicates that more experienced practitioners ask fewer interview and clinical questions in making medical diagnoses. They are also much more likely to ask questions with higher utility indices.—W. Coleman.

3127. Slavskaya, K. A. Rol' pereformulirovaniya v reshenii zadach. [The role of reformulations in problem solving.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, 5, 59-61.—The reformulations which take place in problem solving do not consist only of verbal change of the problem but also of the establishment of new connections and new relationships, of the disclosure in the object itself of a new content and new interrelations. These principles are demonstrated in the solution of a geometrical problem.—A. Cuk.

3128. Wells, William D., & Smith, Georgianna. (Rutgers U.) Four semantic rating scales compared. *J. appl. Psychol.*, 1960, 44, 393-397.—In the construction of semantic rating scales, what format works best? "The questionnaire used in this investigation consisted of 24 eight-step rating scales. . . . All the scales were bipolar, and were defined by words or phrases at the scale poles, in the manner of the Semantic Differential. . . . The ratings were made by approximately 400 housewives . . . interviewed in their own homes by 11 professional interviewers." Rating and interviewer reports were the criteria. Methods were compared. "Whatever method is chosen; the choice should be made with a thoughtful evaluation of the influences these details of format and administration may have upon results."—J. W. Russell.

(See also Abstracts 3362, 3413(a))

#### Concept Formation

3129. Michon, J. A. An application of Osgood's "semantic differential" technique. *Acta psychol., Amst.*, 1960, 17, 377-391.—12 "emotions" and the emotional value of 8 newspaper reports on different crimes are evaluated on 8 contrast scales by a sample of 50 Ss. Results: a factorial structure is found, mainly consisting of 3 independent factors: value, potency and dynamic; semantic meaning differs little between men and women, or under and over 25 years of age, or among social occupations.—G. Rubin-Rabson.

#### Decision & Information Theory

3130. Cohen, John, & Hansel, C. E. M. (U. Manchester, England) Preferencias en el juego por diferentes combinaciones de suerte y habilidad. [Preferences in the game for different combinations of luck and ability.] *Rev. Psicol. gen. apl., Madrid*, 1959, 14, 735-738.—29 Ss, averaging 15 years old, were offered 4 situations in which throwing a ball through an aperture gave a reward. Probability of success was held constant, but skill and luck were called for in varying degrees so that the choice of a situation maximizing luck minimized



skill, and vice versa. Ss chose situations maximizing skill. In a 2nd study, 84 15-year-old males and 118 male and female professional school students were offered 7 combinations with the same composed probability. Most preferred skill and over  $\frac{1}{3}$  preferred to eliminate luck. Many preferred a 50% luck situation, especially grammar school classics majors. Other breakdowns are made.—B. S. Aaronson.

3131. Feather, N. T. Subjective probability and decision under uncertainty. *Psychol. Rev.*, 1959, 66, 150-164.—The concept of subjective probability is investigated in Levin's level of aspiration, Tolman's principles of performance, Rotter's fundamental equation in social learning theory, Edward's subjectively expressed utility (SEU) model in decision theory, and Atkinson's risk-taking model. Though from different areas in psychology, the similarity of these concepts is demonstrated. One discrepancy between the concepts, however, is open to experimental investigation: are valences, reinforcement values, and utilities independent of subjective probability or not? Experiments to test this are outlined. (36 ref.)—W. J. Koppitz.

3132. Flament, C. Comportement de choix et échelle de mesure. I. Étude théorique. II. Étude expérimentale. [Choice behavior and measuring scale. I. Theoretical study. II. Experimental study.] *Bull. Cent. Etud. Rech. Psychotech.*, 1960, 9, 165-186.—"A model is proposed for defining a measure over the whole of a group of objects, starting out from the probability of the choice of the objects in the whole; the method is applied to paired comparisons as well as to choices within groups of any size whatever. Moreover, preferential pluridimensional structures, which may quite normally show apparent incoherencies interpreted by the model, are likewise studied." Both Thurstone and Luce models are used in an experimental case but the model devised by the author can be applied to a considerable number of choice situations.—V. Sanua.

3133. Liverant, S., & Scodel, A. Internal and external control as determinants of decision making under conditions of risk. *Psychol. Rep.*, 1960, 7, 59-67.—"It is hypothesized that behavior in a situation involving decision making under conditions of risk is influenced by a dimension of internal-external control. Internally controlled persons (Is) are conceptualized as persons who attempt to maintain control in chance-dominated situations by a cautious and planned selection of probabilities, whereas externally controlled persons (Es) decide according to "hunches" or previous outcomes. As differentiated by a forced choice personality test, 28 Is and 26 Es engaged in a gambling situation in which each S was required to bet on the outcome of the toss of a pair of dice 30 times. On each trial S selected one of four amounts to bet on one of seven alternative outcomes with known objective probabilities. The principal differences between Is and Es were that the Is chose significantly more intermediate and significantly fewer low probability bets than the Es, significantly more Is than Es never selected an extreme high or low probability bet, the amount of money wagered on safe as against risky bets was significantly greater for Is, and there was a tendency for Is to be less variable in choice of alternatives."—C. H. Ammons.

3134. Suppes, Patrick, & Atkinson, Richard C. Markov learning models for multiperson interactions. Stanford, Calif: Stanford Univer. Press, 1960. xii, 296 p. \$8.25.—The text applies statistical learning theory to small group experiments that closely resemble game situations. Chapters 1 and 2 describe the theory and method of analysis. Chapters 3-11 are devoted to a detailed presentation of experiments. Topics include 2-person games, communications between the 2 players, varying amounts of information concerning the payoff matrix, monetary payoffs, and a 1-person situation designed for the measurement of utility on the basis of paired comparison data. In the final chapter, various extensions of the theory are considered ranging from the Asch-type situation of social conformity to experimental simulation of an economic market.—C. A. Kiesler.

#### PARAPSYCHOLOGY

3135. Ehrenwald, J. Schizophrenia, neurotic compliance, and the psi hypothesis. *Psychoanal. psychoanal. Rev.*, 1960, 47(2), 43-54.—Telepathy is a process fashioned after the model of intrapsychic communication in the primordial mother-child unit. Telepathy is subjected to organic repression and is superseded by more desirable and effective interpersonal communication. The schizophrenic breakdown is in part to be attributed to the failure of organic repression. Every telepathic incident involves the temporary fusion of 2 emotionally linked individuals into 1 functional unit, reestablishing for a fleeting moment the original mother-child unit as it existed at an early developmental stage.—D. Prager.

3136. Lambert, G. W. The geography of London ghosts. *J. Soc. Psych. Res.*, 1960, 40, 397-409.—After describing records of cases of haunting and poltergeists throughout London, the writer gives a geographic distribution of such occurrences, naming 8 streets and 2 squares. A map shows these streets and the course of the Tyburn river as related to the areas. He feels that underground rivers point to a cause of these occurrences, and that dry and wet years also show influences. Any explanation should look "underground" for further study of causes, because of unaccountable noises and feelings experienced by those reporting occurrences.—O. I. Jacobsen.

3137. Levyns, J. E. P. L. Precognition of a near accident. *J. Soc. Psych. Res.*, 1960, 40, 419-421.—3 statements are given as evidence of precognition of this described event (near accident). The wife of the writer stated that on a certain date after her husband had left by car for a destination, she had finished her lunch (2.00 P.M.) and was relaxing, awaiting her teaching, when she clearly heard her husband's voice saying: "My God! I nearly hit that child." Later she learned that this near-accident had actually occurred, but an hour later. A signed statement by a witness to the near-accident also is given. No explanations are given for this precognition.—O. I. Jacobsen.

3138. Pratt, J. G. (Duke U.) Taking stock in parapsychology. *J. Parapsychol.*, 1960, 24, 245-257.—The developments in the field over the past third century are surveyed in terms of methods, findings, and general progress. The paper was presented as

the presidential address at the 3rd annual convention of the Parapsychological Association.—J. G. Pratt.

3139. Ratte, Rena J. (Lewis and Clark Coll.) **Comparison of game and standard PK testing techniques under competitive and noncompetitive conditions.** *J. Parapsychol.*, 1960, 24, 235-245.—Standard dice-throwing tests for psychokinesis (PK) and tests designed as a game were played with and without the element of competition. The general results, statistically significant in the same scoring aspects as in a previous study, favored the game technique over the nongame technique and the competitive over the noncompetitive situation.—J. G. Pratt.

3140. Rhine, J. B. (Duke U.) **Incorporeal personal agency: The prospect of a scientific solution.** *J. Parapsychol.*, 1960, 24, 279-309.—The difficulties and prospects of research on the question of any kind of personal survival after death are discussed in the light of earlier efforts to investigate the problem, recent advances in parapsychology, and general scientific knowledge. The problem is presented in the larger context of the question of man's place in the universe.—J. G. Pratt.

3141. Roll, W. G. (Psychical Research Found., College Station, Durham, N.C.) **The contribution of studies of "mediumship" to research on survival after death.** *J. Parapsychol.*, 1960, 24, 258-278.—This paper reviews some of the evidence on the problem of survival, mainly from the earlier studies of the societies for psychical research.—J. G. Pratt.

3142. Smythies, J. M. **Three classical theories of mind.** *J. Soc. Psych. Res.*, 1960, 40, 385-397.—From the standpoint of psychical research, the author suggests 3 classical theories of concept of mind, but he also reviews other theories as advanced by philosophers, neurologists and neurobiologists. His 3 theories include: (a) Cartesian dualism, (b) perception, and (c) sense-datum. Cartesian theory claims that we have immediate knowledge of the contents of our minds, through our sensations, images, emotions and thoughts, that the human mind consists of an ego, which is aware of sensations, thoughts, etc., and that our thoughts and experiences are qualitative and unlike nerve impulses to the brain. The perception theory holds that awareness is not direct prehension of physical objects, but represents objects in some way and bears specific relationships to such objects. The sense-datum theory is like the perception theory but holds that our perception of physical objects is indirect, being mediated by sensation, and is not as direct as realism holds. Criticisms are given of all 3 theories.—O. I. Jacobsen.

## PHYSIOLOGICAL PSYCHOLOGY

(See also Abstracts 3296, 3301, 3309)

### NEUROANATOMY & PHYSIOLOGY

3143. Wright, E. A., & Spink, Jean M. (St. Mary's Hosp. Medical School, London, England) **A study of the loss of nerve cells in the central nervous system in relation to age.** *Gerontologia*, 1959, 3, 277-287.—A new method of making total nerve cell counts in the spinal cord of mice was employed to

study age changes. Counts from mice aged 6, 25, and 50 weeks showed no significant differences, but counts from mice aged 110 weeks were approximately 15%-20% lower than those from 6-week mice.—L. Shatin.

(See also Abstracts 3014, 3055)

### BRAIN LESIONS

3144. Kling, A., Orbach, J., Schwartz, N. B., & Towne, J. C. (Michael Reese Hosp., Chicago, Ill.) **Injury to the limbic system and associated structures in cats.** *Arch. gen. Psychiat.*, 1960, 3, 391-420.—"It appears that removal of the amygdala and periform cortex alone is responsible for . . . [stupor, anorexia,] docility, hypersexuality, decreased spermatogenesis, and defective temperature regulation under stress. . . . The placidity and associated effects [of] . . . amygdalectomy could be transformed to seclusiveness, savageness, and obesity by superimposition of the hypothalamic lesion. . . . [The results] would indicate that neural mechanisms . . . responsible for integration of affective and autonomic behavior are not crucially dependent on the integrity of the limbic system." (5 tables, 11 fig., 75 ref.)—L. W. Brandt.

3145. White, Robert J., Schreiner, Leon H., Hughes, Robert A., MacCarty, Collin S., & Grindlay, John H. **Physiologic consequences of total hemispherectomy in the monkey.** *Neurology*, 1959, 9, 149-159.—The report deals with surgical procedure and subsequent functional recovery in 14 Macaca mulatta rhesus monkeys subjected to total hemispherectomy. All hemispherectomized and hemidecorticate monkeys survived the initial operative procedure. No formal behavioral tests were carried out. All animals showed rapid return of consciousness, attending to objects in remaining visual field, avoidance of examiner and biting; within 24-48 hours S located and ate food; within 2 weeks they showed the behavior patterns of normal monkeys. Slowness of reaction and some plasticity remained. The restoration of motor function is interpreted as supporting the theory of bilaterality of motor innervation.—R. G. Gunter.

(See also Abstract 3056)

### BRAIN STIMULATION

3146. Brady, Joseph V., & Conrad, Donald G. (Walter Reed Army Inst. Research, Washington, D.C.) **Some effects of limbic system self-stimulation upon conditioned emotional behavior.** *J. comp. physiol. Psychol.*, 1960, 53, 128-137.—Rats, cats, and monkeys were trained in lever pressing for both brain-shock and water or food reward. A conditioned emotional response (CER) was superimposed upon the base-line behavior by pairing a clicking noise with painful shock to the feet, and all Ss showed a stable CER to the clicker during lever pressing for food or water reward. During lever pressing for brain shock, the CER failed to appear in rats and was attenuated in monkeys, but was completely retained by cats. The reward electrodes were in the caudate nucleus in the cats, and in globus pallidus, septal region, or the medial forebrain bundle in the other animals.—W. A. Wilson, Jr.

3147. Gengerelli, J. A., Procter, D. M., & Woskow, M. H. **Studies in the neurophysiology of**

learning: V. Differential effects of various rates of cerebral "driving" on behavioral modification. *Psychol. Rep.*, 1960, 7, 123-141.—165 white rats operated a Skinner Box on an FI schedule. At fixed repetition rates (10 to 600 pps) a 2.5-sec. train of 40 microamp. square waves, .5 msec. long, were delivered to implanted electrodes. "To determine whether repetition rate of stimulation affected the process of learning the required behavior pattern, cumulative learning curves were analyzed by the method of finite differences. A straight line was fitted to the second differences for each animal's curve, and the two parameters computed. The absolute value of the slope of the line of best fit reflects the rate of change of the animal's lever-pressing rate during the course of the experimental session, the absolute value of the intercept, the point of inflection in the cumulative curve. . . . Repetition rates between 60 and 200 pps gave the largest absolute values of the slope and . . . the total number of lever presses during the fixed experimental session was not significantly influenced by repetition rate of stimulation. Repetition rate of stimulation did not significantly affect the process of experimental extinction."—C. H. Ammons.

3148. Proctor, Lorne D., Knighton, Robert D., Lukaszewski, Jerome, & Bebin, Jose. (Henry Ford Hosp., Detroit, Mich.) Behavioral changes during hypothalamic or limbic stimulation in the monkey. *Amer. J. Psychiat.*, 1960, 117, 511-518.—"Stimulation of various areas of the limbic and hypothalamic regions in the *Macaca mulatta* resulted in a variety of responses. These responses were compared with those obtained on stimulating areas of the mid-brain reticular formation. It would appear that "overlapping" occurs as to the function of the limbic system, the mesencephalic reticular formation and the hypothalamus, in view of the similarity of behavior patterns elicited by stimulating some areas in these three different regions. The EEG patterns from the limbic, reticular (mesencephalic) and hypothalamic systems varied significantly so as to suggest that each system may function basically as an individual component system of the brain, probably influenced by ramifications one with the other. This EEG study is a preliminary investigation."—N. H. Pronko.

#### ELECTRICAL RECORDING

3149. Hughes, John R., Curtin, M. J., & Brown, V. P. Usefulness of photic stimulation in routine clinical electroencephalography. *Neurology*, 1960, 10, 777-782.—Based on (a) records of 1326 patients who were given routine clinical electroencephalograms along with photic stimuli and (b) correlation of the photic responses with the rest of the record. The author concludes: "The addition of photic stimulation to a routine clinical electroencephalographic examination requires a relatively short amount of time. The information and evidence that this procedure yields seems to argue strongly for its routine use."—R. G. Gunter.

(See also Abstract 3303)

#### Electroencephalography

3150. Gibbs, E. L., Rich, C. L., Foix, A., & Gibbs, F. A. (U. Illinois) Electroencephalo-

graphic study of mentally retarded persons. *Amer. J. ment. Defic.*, 1960, 65, 236-247.—"Electroencephalograms, awake and asleep, were recorded on 1118 mentally retarded subjects who did not have cerebral palsy or clinically evident epilepsy. The cases were graded according to severity of mental defect and according to age. They were further subdivided into . . . etiologic groups. . . . In all cases age was an important determinant of the type and amount of abnormality. . . . Normal recordings were found among only 55 per cent of the mentally retarded without epilepsy as compared with 90 per cent among control subjects. Normal electroencephalograms were more common below age 2 and after age 30 than at other ages. Abnormalities were approximately four times greater asleep than awake. . . . Retardates of all age groups showed slightly more low voltage background activity and extremes of slow and fast frequencies than was found among controls. The incidence of abnormality was highest in cases with the lowest intelligence quotients and in those with known etiologies."—C. T. Morgan.

3151. Hubel, D. H. (Walter Reed Army Inst. Research, Washington, D.C.) Electroencephalograms in cats during natural sleep. *Arch. Ital. Biol.*, 1960, 98, 171-181.—"A study of the electroencephalograms of normal cats confirms . . . that a sleeping cat shows protracted periods of low voltage high frequency activity with sporadic muscle twitching. On falling asleep a stage of high voltage slow waves and spindles precedes the low voltage twitching stage." (23 ref.)—C. T. Morgan.

3152. Sem-Jacobsen, Carl Wilhelm. (Gaustad Hosp., Vinderen, Oslo, Norway) EEG study of pilot stresses in flight. *Aerospace Med.*, 1959, 30, 797-801.—"With 8-channel airborne EEG equipment, tracings were made of a group of jet pilots, as well as personnel with no previous flight experience, during simulated combat flight. A uniform standardized flight schedule was utilized. On the basis of the EEG tracings, thirty jet pilots were divided into three groups according to the changes seen in the records. A minimal, B marked, and C gross. The same pilots were graded by the Air Force according to their flight performances. The results obtained strongly support a close correlation between the changes in the brain as measured by EEG during flight stress and the pilot's ability to perform under these conditions. Airborne EEG recording is demonstrated as a new method for studying the stress to which the jet fighter pilot is subjected."—Author summary.

3153. Torii, Shizuo, & Sugi, Shunji. (Toho U. School Medicine, Tokyo, Japan) Electrical activity of hippocampus in unrestrained rabbits. *Folia psychiat. neurol. Jap.*, 1960, 14, 95-103.—"Definite behavioral manifestations were correlated with 4 levels of electrical activity of the hippocampus; the more excited the animal, the slower its hippocampal activity. Neocortical activity showed no definite correlation with behavior."—W. A. Wilson, Jr.

3154. Yoshii, Naosaburo; Hasegawa, Yoshiharu, & Yamazaki, Hidekazu. (Osaka U., Japan) Electroencephalographic study of defensive conditioned reflex in dog. *Folia psychiat. neurol. Jap.*, 13, 320-367.—Changes in cortical and subcortical EEG were studied during conditioning and extinc-

tion of limb flexion to electric shock. The data support the theory that in conditioning the CS elicits impulses which "execute control over the center of unconditioned reflex through the non-specific pathway by the cooperation of the brain-stem reticular system and amygdaloid-hippocampal system."—*W. A. Wilson, Jr.*

(See also Abstracts 3053, 3163, 3798, 3866)

#### Evoked Potentials

3155. Fleming, T. Corwin, & Everts, Edward V. (National Inst. Mental Health, Bethesda, Md.) **Multiple response to photic stimulation in cats.** *Amer. J. Physiol.*, 1959, 197, 1233-1236.—This study was carried out in order to compare the multiple cortical response to a photic stimulus and the secondary response to sciatic nerve stimulation. Late responses to flash and to sciatic nerve shock were recorded in acute cat preparations anesthetized with pentobarbital. The responses to the 2 types of stimuli differed in distribution (visual multiple response confined to primary receiving area, sciatic secondary generalized), form, and anesthetic level optimal for their production (deeper anesthesia for the sciatic secondary than for the visual multiple response). In cats with chronically implanted electrodes, it was found that the multiple response to flash was present during natural sleep and was abolished by arousal.—*Journal abstract.*

(See also Abstract 3549)

#### ENDOCRINE & BIOCHEMICAL EFFECTS

3156. Schwarz, B. E. **Ordeal by serpents, fire, and strychnine.** *Psychiat. Quart.*, 1960, 34, 405-429.—In the Free Pentecostal Holiness Church poisonous rattlesnakes and copperheads are handled without fatalities, flames and flaming coals are handled during ecstasy without injury to body or clothing, and strychnine in toxic doses is ingested during exaltation without harmful effects. Explanatory hypotheses and practical applications of these phenomena are presented.—*D. Prager.*

#### PSYCHOPHARMACOLOGY

3157. Bomberg, Lars-H., & Wassen, Anders. (Clinical Neurophysiological Lab. & Clinical Chemical Inst., Gothenburg, Sweden) **Preliminary report on the effect of alcohol on dark adaptation, determined by an objective method.** *Acta ophthalmol.*, 1959, 37, 274-278.—"An objective method for determination of the degree of dark adaptation is described. . . based on automatically increased rate of illumination, until optokinetic nystagmus can be recorded electronystagmographically. Preliminary test with the method in order to study the effect of small doses of alcohol showed no definite influence on the dark adaptation during the first ten minutes of this process."—*M. M. Berkun.*

3158. Elder, T., & Lewis, D. J. **Effects of a salivary inhibitor and facilitator upon food intake.** *Psychol. Rep.*, 1960, 7, 115-118.—"Twenty-four rats were given a daily injection in one of four drug conditions until each had received all four drugs in a counter-balanced order. The drug conditions employed a 20% solution of pilocarpine in distilled wa-

ter, 20 gr. of benzocaine in a 64% solution of ethyl alcohol, a 64% solution of ethyl alcohol, and a control. The amount of food eaten was determined at successive intervals of 1, 4, 10, and 15 min. following oral administration of the drug conditions. It was found that none of the drugs had a differential effect on the amount of food eaten over any of the time intervals."—*C. H. Ammons.*

3159. Jacobsen, Erik. (Dumex Ltd., Copenhagen, Denmark) **The comparative pharmacology of some psychotropic drugs.** *Bull. WHO*, 1959, 21, 411-493.—"The author undertakes a systematic review of the effects of a number of the better known compounds on the various levels of the central nervous system. The antagonistic and synergistic effects of giving the drugs in combination are also discussed as well as the possible relationships between the central effects and certain 'basic' effects on somatic functions."—*J. C. Franklin.*

3160. Pichot, P., & Reiman, S. (Hôpital Psychiatrique Ste. Ann, Paris, France) **L'effet de l'ingestion d'alcool sur le niveau d'aspiration.** [The effect of the ingestion of alcohol upon level of aspiration.] *Rev. Psychol. appl.*, 1959, 9, 237-247.—A level of aspiration test and the Guilford-Zimmerman Temperament Survey were given to 2 groups each of 20 student volunteers. Group A took the test ½-hour after drinking 16 cc. of cognac, and was retested between 4 and 14 days later without alcohol; Group B was given the cognac before the retest. No significant differences were found in the means of the groups. Some slowing of learning appeared under the influence of alcohol, especially in the retest. Ss who were introverted (in Eysenck's sense of the term) appeared to become more extraverted after drinking; extraverted Ss became more introverted.—*W. W. Wattenberg.*

3161. Reynolds, G. S., & Van Sommers, P. (Harvard U.) **Effects of ethyl alcohol on avoidance behavior.** *Science*, 1960, 132, 42-43.—3 albino rats trained to avoid electric shock were stomach-loaded with from 1 to 5 ml. of 32% aqueous solution of ethyl alcohol prior to the experimental session. Small doses produced some increases in response rates and a consistent decline in shocks received. Larger doses produced progressive uncoordination, accompanied by lower response rates and an increase in shocks received. "Similar effects may perhaps be produced by other drugs—for example, barbiturates."—*S. J. Lachman.*

3162. Sakamoto, Kenji. (Kyoto U., Japan) **LSD-25, mescaline induced psychosis and catechol amine metabolism.** *Folia psychiat. neurol. Jap.*, 1959, 13, 257-261.—After oral administration of mescaline or LSD-25 there is a temporary increase in plasma adrenaline concentration. A secondary decrease in adrenaline parallels an increase in the adrenaline-oxidation strength of the plasma, and both coincide with the onset of hallucinations.—*W. A. Wilson, Jr.*

3163. Shirahashi, Koichiro. (Tohoku U., Sendai, Japan) **Electroencephalographic study of mental disturbances experimentally induced by LSD-25.** *Folia psychiat. neurol. Jap.*, 1960, 14, 140-155.—Oral administration of 50 micrograms of LSD-25 to 6 normal adults produced no definite changes in EEG



except during the appearance of visual hallucinations, when alpha suppression appeared in all leads, correlated in amount with the vividness of the hallucinations.—*W. A. Wilson, Jr.*

3164. Singh, S. D., & Eysenck, H. J. (U. London, England) **Conditioned emotional response in the rat: III. Drug antagonism.** *J. gen. Psychol.*, 1960, **63**, 275-285.—24 emotionally reactive and 24 nonreactive rats were used to investigate the antagonism of 2 centrally acting drugs on the formation of a conditioned emotional response of the "anxiety" type. The response was defined in terms of a decrease in lever pressing in a Skinner box in the presence of a conditioned stimulus which had been previously associated with a shock. Emotional reactivity of the Ss had a significant interaction with the drug antagonism.—*Author abstract.*

3165. Spira, Leo. (Shenley Hosp., St. Albans, Hertfordshire, England) **Tetany, mental illness, and fluorine.** *Folia psychiat. neurol. Jap.*, 1959, **13**, 368-384.—Treatment directed against chronic fluorine poisoning was given to 2 patients suffering from severe depression. Their subsequent improvement is discussed in relation to the hypothesis that "Fluorine represents the long-sought poison producing tetany. Tetany often leads to the development of mental illness." (101 ref.)—*W. A. Wilson, Jr.*

3166. Taeschler, M., Weidmann, H., & Cerletti, A. (Sandoz A. G., Basel, Switzerland) **Die Wirkung von LSD auf die Reaktionszeiten bei einer bedingten Fluchtreaktion und im Analgesietest.** [The effect of LSD on the reaction time in a conditioned avoidance reaction and in analgesia tests.] *Helv. physiol. pharmacol. Acta*, 1960, **18**, 43-49.—An investigation employing a conditioned avoidance response in the rat and 2 tests of analgesia in the mouse was made to ascertain the extent to which LSD modifies the response to sensory stimuli in the central nervous system. It was found that very small doses of LSD significantly shorten reaction time in all the tests. This effect of LSD may be regarded as the result of sensitization of central nervous structures to afferent impulses.—*T. Verhave.*

3167. Uhr, L., Platz, A., & Miller, J. G. **A pilot experiment on the effects of meprobamate and of prochlorperazine on tests of cognition and perception.** *Percept. mot. Skills*, 1960, **11**, 90.—Preliminary data from double-blind administration of meprobamate and prochlorperazine on cognition and perception of normal males 21 yr. or older indicated behavioral toxic effects of small magnitude.—*C. H. Ammons.*

(See also Abstracts 3156, 3564)

#### ENVIRONMENTAL EFFECTS

3168. Bering, E. A., Carrington, K., Fowler, F. D. **Acute effects of x-radiation on reflex arcs of the spinal cord.** *Neurology*, 1959, **9**, 251-255.—A study of the acute effects of x-radiation on the reflex arcs of the spinal cord as measured by electrophysiologic methods. "In cats, 5,000 r of 250-kv. x-ray were given to the exposed lumbar spinal cords. . . . Some early weakness was observed but completely disappeared in twenty-four hours. Complete paraplegia developed on the sixth or seventh day. . . .

Anterior root responses to posterior root stimulation before and immediately after irradiation were investigated. By the fifth hour after irradiation, response time became significantly delayed. . . . The polysynaptic response gradually diminished in amplitude, and, eleven hours after irradiation, was almost absent. At this time, the monosynaptic spike showed marked reduction in amplitude but was never more than a single spike. This later suggested cellular or synaptic alterations."—*R. Gunter.*

3169. Brown, W. Lynn; Carr, Richard M., & Overall, John E. (U. Texas) **The effect of chronic whole-body irradiation on peripheral cue associations.** *J. gen. Psychol.*, 1959, **61**, 113-119.—Irradiated monkeys did not associate peripherally placed stimuli. The results support the hypothesis that radiation produces a restriction in the number of stimuli simultaneously effective.—*H. Ruja.*

3170. Frankel, Harry M. (State U. Iowa) **Effects of restraint on rats exposed to high temperature.** *J. appl. Physiol.*, 1959, **14**, 997-999.—Male rats were placed in a cage either 8 in. × 8 in. × 10 in. (free) or 2 in. × 2 in. × 8 in. (restrained) and exposed to ambient temperatures between 40° and 60° C. 'Restrained' rats died sooner than 'free' animals at all temperatures.—*C. T. Morgan.*

3171. McDowell, A. A., & Brown, W. Lynn. (U. Texas) **Latent effects of chronic whole-body irradiation upon the performance of monkeys on the spatial delayed-response problem.** *J. gen. Psychol.*, 1959, **61**, 61-64.—Ss were 34 rhesus monkeys. Some were exposed to gamma and neutron radiation, some not. When tested on a delayed-response problem, no difference appeared between the irradiated and controls during the first 100 days following exposure, but 2 yr. after exposure, irradiated monkeys performed better than nonirradiated and those who received high-dose radiation performed better than those who received a low dose.—*H. Ruja.*

3172. White, Robert K., & Brown, W. Lynn. (U. Texas) **Conditioned food avoidance on a T-maze in irradiated rats.** *J. gen. Psychol.*, 1959, **61**, 151-158.—18 rats, approximately 120 days old, were deprived of food for 21-22 hours, then irradiated with a lethal dose, then deprived of food for another 66 hours. Exposed to food, they ate; but in successive trials in running a T-maze they ate progressively less. Their avoidance of food was significantly greater than chance and significantly greater than that of a control group.—*H. Ruja.*

(See also Abstract 4201)

#### NUTRITION

3173. Meyer, J. H., & Hargus, W. A. (U. California, Davis) **Factors influencing food intake of rats fed low-protein rations.** *Amer. J. Physiol.*, 1959, **197**, 1350-1352.—Rats fed low-protein rations increased food intake, weight gain, and gain in lean body mass when forced to expend energy by low environmental temperature or exercise (swimming). Rats fed low-protein rations with a higher proportion of fat in their weight gain had a greater food intake and gain in lean body mass. Therefore, gain in lean body mass was improved not only by stimulating energy loss by cold environment or exercise but by an innate ability to deposit more fat in the weight

gain, because of an increased food intake, and hence protein intake.—*Journal abstract.*

#### GENETICS & INHERITANCE

3174. Kallman, Franz J., & Jarvik, Lissy F. (New York State Psychiatric Inst., NYC) **Individual differences in constitution and genetic background.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 216-263.—The nature-nurture controversy springs from the concept that heredity produces unalterable finished entities at birth. Aging is part of the total development pattern brought about by genes. Genetic background determines health and longevity. Techniques for the study of animal and human genetics are discussed. Serial family and co-twin control data show a genetic basis for life expectancy. Intelligence curves in 1-egg twins are very similar and the decline in intellectual abilities seems less than has been inferred from cross-sectional studies. The genetic analysis of senescent pathological conditions has been handicapped by insufficient data. (180 ref.)—B. S. Aaronson.

3175. McClearn, Gerald E. (U. California) **Strain differences in activity of mice: Influence of illumination.** *J. comp. physiol. Psychol.*, 1960, 53, 142-143.—C57BL/Crgl mice, which have pigmented eyes, displayed more activity in a modified open-field situation than did A/Crgl animals, which are albinos. The difference between the strains was less under red than under white conditions of illumination.—W. A. Wilson, Jr.

3176. Uyeno, Edward T. (U. Toronto) **Heredity and environmental aspects of dominant behavior in the albino rat.** *J. comp. physiol. Psychol.*, 1960, 53, 138-141.—The behavior of 24 young male rats (all reared by foster mothers) was studied as a function of the dominance of the true parents and of the foster mother. Dominance was measured in a food-competition situation. Rats born of dominant parents were more dominant when reared by submissive mothers than when reared by dominant mothers, but in either case were more dominant than rats born of submissive parents. Dominance did not correlate with timidity, weight, eating behavior activity, or intelligence.—W. A. Wilson, Jr.

(See also Abstracts 3254, 3558)

#### SENSORY PHYSIOLOGY

3177. Bernhard, C. G., & Ottoson, D. (Karolinska Inst., Stockholm, Sweden) **Comparative studies on dark adaptation in the compound eyes of nocturnal and diurnal lepidoptera.** *J. gen. Physiol.*, 1960, 44, 195-203.—Sensitivity was defined by measurements of the intensity of illumination necessary to elicit an electrical response of a given magnitude. In the diurnal species the curve for dark adaptation was smooth, but in the nocturnal species adaptation proceeded in 2 phases. The intensity amplitude relationship was the same in the light-adapted as in the dark-adapted eye.—D. R. Peryam.

3178. Biersdorf, William R., & Armington, John C. (Walter Reed Army Inst. Research, Washington, D. C.) **Level of light adaptation and the human electroretinogram.** *J. Opt. Soc. Amer.*, 1960,

50, 78-82.—"Further investigation of a temporal increase in electroretinogram amplitude during light adaptation is reported. The effects of red and white test flashes were compared at several adaptation levels. The temporal increase was found only for high luminance adaptation levels and only for white test flashes. Second, the effects of constant luminance test flashes upon a wide range of adaptation levels were investigated. It was found that increasing levels of light adaptation produced decreases in the amplitudes of the components of the electroretinogram. Long latency components were affected by lower levels of light adaptation and to a greater extent than short latency components. The results are considered in relation to the duplicity theory and to the resting potential of the eye."—D. S. Blough.

3179. Dzendolet, Ernest. (Brown U.) **Effect of preparation and electrode placement on the frog ERG.** *J. Opt. Soc. Amer.*, 1960, 50, 903-908.—"Diffuse illumination was used to stimulate the in-place frog eye. The intact, essentially intact, and opened eye preparations were used." Electrode placements yielding the ERG and the EIRG were reported. "Two hypotheses were advanced. The first was the presence of an insulating layer, probably Bruch's membrane, in most of the eye except for the cornea which is insulated by Bowman's membrane. The second was that the EIRG is a complex waveform resulting from the ERG's entering both the probe and reference electrodes and summing algebraically if the insulating layer just mentioned were sufficiently disturbed."—D. S. Blough.

3180. Goodman, George, & Ripps, Harris. (New York U.) **Electroretinography in the differential diagnosis of visual loss in children.** *Arch. Ophthalmol., Chicago*, 1960, 64, 221-235.—When youthfulness of the patient precludes subjective tests of visual fields, color discrimination, etc., and visual loss is suspected despite an ophthalmoscopically normal eye, electroretinography provides an objective approach to assessment of the functional status of the eye. Fundamentals of ERG recording and clinical interpretation are reviewed with notes on the differential diagnosis of subnormal vision with normal fundi and with macular alterations, and night blindness with normal fundi and with changes. Emphasis is placed on diagnosis of congenital tapetoretinal disorders and cone blindness, conditions due to retinal abnormalities, often without fundus lesions, recently revealed by ERG work to have a greater incidence than previously estimated.—R. L. Sulzer.

3181. Hebbard, Frederick W., & Marg, Elwin. (U. California, Berkeley) **Physiological nystagmus in the cat.** *J. Opt. Soc. Amer.*, 1960, 50, 151-155.—"Cats were prepared by the encéphale isolé technique . . . eye movements were recorded using the optical-lever method. The records showed physiological nystagmus similar to that in man, although the cats had fewer and smaller saccades. Some saccades were binocular, but usually they were unocular. The fine tremor varied in frequency from 35-65 cps, averaging 50 cps, and in amplitude from 4-52 sec. of arc, averaging 22 sec. Curare decreased and ultimately abolished eye movements and physiological nystagmus, whereas neostigmine increased them. Physiological nystagmus is therefore mediated by

effluent neural stimulation of the eye muscles."—D. S. Blough.

3182. Hill, J. H. (Washington U.) **The effect of oxygen deprivation on the X-wave and B-wave of the human electroretinogram.** *Dissertation Abstr.*, 1960, 21, 1636.—Abstract.

3183. Missotten, L. (National Belgian Fund Scientific Research) **Etude des batonnets de la retine humaine au microscope électronique.** [Study of the rods of the human retina with the electron microscope.] *Ophthalmologica*, 1960, 140, 200-214.—"The ultrastructure of the normal human retinal rod, observed by means of electron microscope, is described. The similarities and differences compared with the retinæ of other species are discussed." (28 ref. English summary)—C. T. Morgan.

3184. Zeidler, Inga. (Eye Clinic, Karolinska Sjukhuset, Stockholm, Sweden) **The clinical electroretinogram.** *Acta ophthalmol., Kbh.*, 1959, 37, 294-301.—"An investigation has been made to determine whether any difference exists between the size of the b-potential of the electroretinogram (ERG) in men and women and in different age groups. The case material consists of 411 normal eyes, 229 in men and 182 in women, the age of the subjects ranging from 5-80 years. Statistical analyses show that, in the 31-50 year age groups, a significant difference is present between the size of the b-potential in men and in women, it being larger in women. A significant difference is also found . . . between the size of the b-potential in different age groups."—M. M. Berkun.

(See also Abstracts 3006, 3030, 4180)

#### ANIMAL PSYCHOLOGY

3185. Edwards, Robert L., & Livingstone, Robert, Jr. (Biology Lab., Woods Hole, Mass.) **Observations on the behavior of the porpoise *Delphinus delphis*.** *Science*, 1960, 132, 35-36.—"Common porpoises have been observed . . . feeding on fish that escaped an otter trawl. An echo-sounder also recorded, in one instance, a descent of a porpoise to a depth of 200 feet in less than 2 minutes." Porpoises passed within a few feet of the boat several times and did not appear to be alarmed by the boat or the many people moving around on deck.—S. J. Lachman.

3186. Entwisle, D. G. (U. Bristol, England) **A preliminary study of age, learning and adaptability in the rat.** *Gerontologia*, 1959, 3, 261-265.—2 groups of rats aged 110 and 535 days ( $N=9$  and  $N=11$ ) were comparatively measured for learning, activity, and emotionality in a "Perspex" box apparatus. No differences in learning performance were found, but there were significant differences in emotionality and activity: the older rats were more emotional but less active than the younger rats.—L. Shatin.

(See also Abstract 4152)

#### EVOLUTION & DEVELOPMENT

##### REFLEXES & INSTINCTIVE BEHAVIOR

3187. Graber, R. R., & Cochran, W. W. (Illinois National History Survey, Urbana) **Evaluation of an aural record of nocturnal migration.** *Wilson Bull.*, 1960, 72, 253-273.—In a paper presented by the authors in 1959, techniques for detecting and recording the calls of nocturnal migrants were described. This paper emphasizes the presentation of data and compares the results with those obtained by other types of observations. The aural record in relation to weather conditions is discussed.—*Biological Abstracts*.

3188. Griffin, Donald R. (Harvard U.) **Echoes of bats and men.** Garden City, N.Y.: Anchor Books, Doubleday, 1959. 156 p. \$95.—A Science Study Series book on the physics and biology of echolocation in porpoises, bats, and man. Chapter headings are: "Voices of Experience," "Echoes as Messengers," "Airborne Echoes of Audible Sounds," "The Language of Echoes," "Sonar and Radar," and "Suppose You Were Blind." Some of the material of this book is discussed at greater length in the author's book *Listening in the Dark: The Acoustic Orientation of Bats and Men* (see 33: 7554). (15 ref.)—J. C. G. Loring.

3189. McNiven, Malcolm A. (E. I. du Pont & Co., Inc.) **"Social-releaser mechanisms" in birds: A controlled replication of Tinbergen's study.** *Psychol. Rec.*, 1960, 10, 259-265.—". . . chickens, ducks, and pheasants were presented with the same type of silhouette used by Tinbergen. A total of 1178 trials were run with the three species of birds. The silhouette was presented in a sailing manner (moving horizontally over the birds), and in a swooping manner. The silhouette was presented alternately in one direction then the other. . . . There was no difference in the number of escape response to the silhouette when it moved in the two directions."—R. J. Seidel.

3190. Martin, E. M., & Haugen, A. O. (Iowa State U.) **Seasonal changes in wood duck roosting flight habits.** *Wilson Bull.*, 1960, 72, 238-243.—Wood ducks (*Aix sponsa*) roost in large numbers during the late summer and fall, preferring marshes and swamps. Roosting flight habits of these ducks were studied in the area of Muskrat Lake, Louisa County, Iowa. Roosting flights changed in the fall, occurring later in the evening and taking less time as the season progressed. Morning activity ended 15 min. after sunrise in the early fall but took place entirely before sunrise in October and November.—*Biological Abstracts*.

3191. Pettingill, O. S., Jr. **Creche behavior and individual recognition in a colony of rock hopper penguins.** *Wilson Bull.*, 1960, 72, 213-221.—Creche formation in rock hopper penguins (*Eudyptes cristatus*) of the Balkland Islands begins about 12 days after hatching and reaches a peak when the chicks are about 17 days old. During this time they are fed only by their own parents. Creches serve as protection against predators and loss of body heat and provide companionship. They are often accompanied by nonbreeding adults or those which have lost their young. They tend to break down after the chicks have lost their down and are nearly full size.—*Biological Abstracts*.

3192. Suthers, R. A. (129 Griswold St., Delaware, O.) **Measurement of some lake-shore territories of the song sparrow.** *Wilson Bull.*, 1960, 72, 232-237.—Measurements were made of 4 adjacent

song sparrow (*Melospiza melodia*) territories along the shore of Lake Itasca, Clearwater County, Minnesota. Island territories of these birds have been reported to be less than  $\frac{1}{10}$  the size needed on mainland areas. In comparing the 3 habitats, it was found that lake-shore territories were intermediate between island and mainland situations, utilized areas averaging 0.47 acre with maximum territories averaging 96% of this.—*Biological Abstracts*.

(See also Abstract 3176)

#### MOTIVATION & EMOTION

3193. Bare, John K., & Cicala, George. (Carleton Coll.) Deprivation and time of testing as determinants of food intake. *J. comp. physiol. Psychol.*, 1960, 53, 151-154.—The effects of length of deprivation and the time of day at which food is restored on the course of subsequent food intake were studied in rats. Increasing the deprivation period led most prominently to an increase in the size of the first meal; the magnitude of this effect was influenced by the time of restoration of food in a manner best explained by considering the momentary strength of all drivers.—*W. A. Wilson, Jr.*

3194. Capaldi, E. J., & Robinson, Donald E. (U. Texas) Performance and consummatory behavior in the runway and maze as a function of cyclic deprivation. *J. comp. physiol. Psychol.*, 1960, 53, 159-164.—Comparisons were made in 2 situations between groups of rats subjected to the same daily deprivation cycle for different numbers of days. Ss that had had longer experience with the feeding schedule "(a) made runs of shorter latency in a runway situation and fewer errors in a maze, and (b) made a greater number of lower-latency consummatory responses." Possible explanations and implications of the results for latent learning studies are discussed.—*W. A. Wilson, Jr.*

3195. Carr, Richard M., & Brown, W. Lynn. (U. Texas) The effect of sustained novelty upon manipulation in rhesus monkeys. *J. gen. Psychol.*, 1959, 61, 121-125.—Monkeys exhibited significantly different preferences for wood, plastic, cork, rubber, and metal objects (in that order) for manipulation. This is taken to support the hypothesis that manipulation continues as novelty is maintained.—*H. Ruja*.

3196. Deutsch, J. A., & Jones, A. D. (Center Advanced Study in the Behavioral Sciences) Diluted water: An explanation of the rat's preference for saline. *J. comp. physiol. Psychol.*, 1960, 53, 122-127.—When equal amounts of hypotonic saline and water (or of 2 concentrations of saline) were presented as alternative rewards in a T maze, rats learned to choose the less-saline solution. In the same situation, nonthirsty rats did not learn to seek out either solution and only rarely drank either reward. An hypothesis related to certain neurophysiological findings is presented to reconcile these results with the fact that rats drink more saline than water when both are present.—*W. A. Wilson, Jr.*

3197. Freeman, Walter J. (U. California, Los Angeles) An ergometer for measuring work from cats as an index for drive. *J. appl. Physiol.*, 1959, 14, 1071-1072.—The strength and duration of pull exerted by a harnessed cat on a rope as it moves toward food is measured.—*C. T. Morgan*.

3198. Goldstein, Allan C. (Yale U.) Starvation and food-related behavior in a poikilotherm, the salamander, *Triturus viridescens*. *J. comp. physiol. Psychol.*, 1960, 53, 144-150.—Effects upon the hunger drive of periods of starvation lasting up to 32 days were noted. Although weight-loss and speed of attack of food increased throughout this period, the amount of gross motor activity remained constant, and the amount of subsequent food intake reached a maximum after 4-8 days' starvation. A moving stimulus generally facilitated feeding behavior, and after long periods of starvation, odor cues alone often elicited feeding responses.—*W. A. Wilson, Jr.*

3199. Hall, John F., Low, Lorraine, & Hanford, Peter. (Pennsylvania State U.) A comparison of the activity of hungry, thirsty, and satiated rats in the Dashiell checkerboard maze. *J. comp. physiol. Psychol.*, 1960, 53, 155-158.—In an attempted replication of a classical study, the activity of hungry, thirsty, and satiated rats "was measured . . . for 10 min. per day for five consecutive days. . . . satiated animals were as active as those animals operating under a need state." The relationship of activity to need, reward, and frustration is discussed.—*W. A. Wilson, Jr.*

3200. Spengler, J. (U. Zürich, Switzerland) Ein Apparat zur quantitativen fortlaufenden Registrierung der Nahrungs- und Wasseraufnahme von Ratten. [An apparatus for the quantitative continuous recording of the food and water intake of rats.] *Helv. physiol. pharmacol. Acta*, 1960, 18, 50-55.—An apparatus is described which measures the food and water intake of rats continuously and quantitatively. Spring balances determine the weight of the food and water offered and consumed with the aid of strain gauges and an electromechanical recording device. The feeding and drinking apparatus can be exchanged between cages and allows the animals to feed freely without training on liquid or solid foods of any composition.—*T. Verhave*.

3201. Young, D. R. (Quartermaster Food & Container Inst. for the Armed Forces, Chicago, Ill.) Effect of food deprivation on treadmill running in dogs. *J. appl. Physiol.*, 1959, 14, 1018-1022.—Effect of food deprivation on endurance capacity was studied in dogs under the following conditions: (a) 3 and 5 days of fasting with daily high levels of energy expenditure and (b) 15 days of fasting with low daily levels of energy expenditure. Relative maximum performance, i.e., endurance capacity under conditions wherein work dehydration is a limiting factor, is unaffected by 10-15% body-weight loss and hypoglycemia induced by acute food deprivation. Even with weight loss up to 22%, capacity for daily moderate levels of work is well maintained. Absolute maximum performance (water provided exhaustive treadmill running) improves with 5 days of fasting.—*C. T. Morgan*.

#### SENSORY PROCESSES

##### LEARNING

##### Conditioning

3202. Strouthes, A. (Temple U.) The effect of delay-in-reinforcement, UCS duration, CS-onset UCS-onset interval, and number of CS-UCS



paired presentations on conditioned fear response. *Dissertation Abstr.*, 1960, 21, 1639.—Abstract.

#### Discrimination

3203. D'Amato, M. R. Effect of litter size on brightness discrimination and reversal. *Psychol. Rep.*, 1960, 7, 91-97.—"In Exp. 1, litter size was experimentally manipulated to produce litters of 4, 8, or 16 pups. Under conditions of thirst motivation and water reward, the litter-size variable was found to be without effect on either discrimination or discrimination reversal learning, whether testing occurred soon after weaning or in early adulthood. In Exp. 2, with the motive-incentive conditions shifted to the hunger drive and sucrose solution reward, litter size was again without effect on discrimination or discrimination reversal learning. An interpretation of the effects of early privation in terms of incentive effects was advanced."—C. H. Ammons.

3204. D'Amato, M. R., & Jagoda, H. Transfer of brightness discrimination from bar-pressing to a Y maze. *Psychol. Rep.*, 1960, 7, 83-90.—"Thirty newly weaned albino rats were trained in Skinner boxes on a brightness discrimination until an adequate discrimination was formed. Ss in Condition B had the full-bright pilot light as S<sup>p</sup>, the pilot light dimmed as S<sup>a</sup>; these relations were reversed for Ss of Condition D. Fifteen littermate controls received no operant discrimination training. All Ss were, after varying periods of time, trained on a brightness discrimination in a Y maze, S<sub>1</sub> being in all cases the brighter of two illuminated arms. Ss of Condition B learned the Y-maze discrimination significantly faster than Ss of Condition D, while the controls' performance fell between the means of the experimental Ss. The five different discrimination programs used during operant training did not produce significantly different transfer effects on the Y maze. The role of the negative stimuli in transfer relations was discussed."—C. H. Ammons.

3205. Harlow, Harry F., Harlow, Margaret K., Rueping, Robert R., & Mason, William A. (U. Wisconsin) Performance of infant rhesus monkeys on discrimination learning, delayed response, and discrimination learning set. *J. comp. physiol. Psychol.*, 1960, 53, 113-121.—Groups ranging in age from 60 to 360 days were compared. The ability to learn the 1st object discrimination presented to them increased with age to an asymptote at approximately 150 days, while learning set acquisition was below the adult level in all groups, and was practically nonexistent in the youngest groups. Performance on delayed response problems improved as a function of age, apparently to an asymptote at about 9 months.—W. A. Wilson, Jr.

3206. Sugimoto, Sukeo. (Keio U., Japan) The establishment and abolishment of discrimination in the pigeon. *Jap. psychol. Res.*, 1959, 1(7), 29-35.—The problem of the establishment and abolishment of discrimination learning in the pigeon was investigated in a "pecking-key" conditioning situation. 2 experiments were conducted with 34 Ss about 1 year old. In Experiment I, the establishment of discrimination learning was observed more clearly when the acquisition phase was shifted to the extinction

phase before the completion of discrimination learning than when the acquisition phase was continued to the end. In Experiment II, it was discovered that discrimination learning per se must be distinguished from discrimination behavior since the latter may be extinguished but the former cannot be abolished by extinction procedure. The discrimination gradient hypothesis was proposed to explain the results.—S. Iwahara.

(See also Abstract 3218)

#### Mazes & Problem Boxes

3207. Lutz, Robert E., & Perkins, Charles C., Jr. (Kent State U.) A time variable in the acquisition of observing responses. *J. comp. physiol. Psychol.*, 1960, 53, 180-182.—Rats were run in a single-choice-point maze with  $\frac{1}{2}$  of the responses to each side followed by food reward. When S turned to the right (the observing response) discriminative stimuli indicating reward or nonreward were present during a delay period. Choice of the other side produced an equal delay for a given S but without discriminative stimuli. Groups differed only in length of delay. All nonzero-delay groups made the observing response significantly above chance, and approximately equally often; the zero-delay group did not.—W. A. Wilson, Jr.

3208. Thompson, M. E. Alternation in a T maze as a function of three variables. *Psychol. Rep.*, 1960, 7, 103-110.—A factorial design (10 Ss per cell) was used to determine the role of the following variables in alternation behavior: "(a) stimulus conditions (similar vs. dissimilar maze arms), (b) reinforcement conditions (reward vs. nonreward), and (c) choice conditions (free vs. forced choice on the first trial of each block of two consecutive trials). Ss were run on a cross-shaped maze used as a T, and given four trials, in blocks of two, each day for 12 days. The two trials within each block were given with a 30-sec. intertrial interval, and the interblock interval was 30 min. On half of the 24 blocks Ss were started from the same starting box on both trials. On the other 12 blocks, Ss were started from opposite starting boxes on the two trials. Nonrewarded Ss showed significantly more response alternation than rewarded Ss for all intertrial conditions. . . . A significant interaction between maze arms and reinforcement conditions was found for the 30-sec. and 30-min. intertrial intervals when the stimuli were reversed between trials. When stimuli were held constant between consecutive trials, Ss forced on the first trial of each block showed significantly more alternation than Ss with free choices on both trials of each block. The results appeared [to reconcile] . . . apparent discrepancies" among studies.—C. H. Ammons.

3209. Waller, M., B., Waller, P. F., & Brewster, L. A. A water maze for use in studies of drive and learning. *Psychol. Rep.*, 1960, 7, 99-102.—"A simple water maze was used to investigate the relationship between variations in water temperature (34-20°C) and two performance measures, where 30 mice were required to learn a black-white discrimination. Swimming time was found to be significantly related to water temperature, lower temperatures leading to more rapid swimming. The

measure of choice point errors was unrelated to water temperature within the range used. The water maze appears to be a useful situation for investigating properties of aversive motivation and instrumental escape learning."—C. H. Ammons.

3210. Weyant, R. G. (State U., Iowa) Runway performance as a function of amount of change in, direction of change in, and absolute level of illumination. *Dissertation Abstr.*, 1960, 21, 1640.—Abstract.

#### Avoidance Learning

3211. Imada, Hiroshi. (Kwansai Gakuin U., Japan) The effects of punishment on avoidance behavior. *Jap. psychol. Res.*, 1959, 1(8), 27-38.—Following the establishment of an avoidance response with 200-v. electric shock as US and onset of a light as CS; 5 groups received 118-v., 153-v., 200-v., 260-v., and 340-v. electric shock, respectively, in the previously safe escape-box. Another group followed an ordinary extinction procedure, it received no electric shock. Main results were: (a) Resistance to extinction tended to be stronger for groups with stronger shock. However, the nonshock group showed the greatest resistance to extinction. (b) Response speed in extinction increased with the intensity of shock for the punished groups but again the nonshock group ran most rapidly. These findings were explained in terms of fear drive and avoidance hypothesis.—S. Iwahara.

3212. Meyer, D. R., Cho, Chungsoo, & Wesemann, Ann F. (Ohio State U.) On problems of conditioning discriminated lever-press avoidance responses. *Psychol. Rev.*, 1960, 67, 224-228.—Rats easily learn to press a lever to escape shock but acquire with great difficulty and never perform properly an avoidance lever-press response to a warning light. A postulated explanation is that a lever-press response is a poor antagonist for the freezing-crouching reaction to shock.—C. T. Morgan.

(See also Abstract 3202(a))

#### Reinforcement

3213. Fuchs, Stephanie S. (Reed Coll.) Replication report: An attempt to obtain inhibition with reinforcement. *J. exp. Psychol.*, 1960, 59, 343-344.—A replication of Kendrick's experiment (see 33: 9826) with the exception that rats in this experiment were not selected for emotionality and were run one at a time. "No extinction of the running response occurred . . . within 41 days of 30 trials per day."—C. T. Morgan.

3214. Hall, Robert D., & Kling, J. W. (Brown U.) Amount of consummatory activity and performance in a modified T-maze. *J. comp. physiol. Psychol.*, 1960, 53, 165-168.—Rats were trained on a brightness discrimination problem with a sucrose solution as reward. 2 groups got a low amount of reward, presented in either 1 or 6 cups; 2 groups got a high amount, presented in either 2 or 6 cups. Whereas number of lapping responses was a joint function of number of cups used and amount of reward, the speed of discrimination learning was determined solely by the number of cups used. It is suggested that the "attaining responses" of approaching the cups may be more important in de-

termining reinforcement effects than the restricted ingestion responses.—W. A. Wilson, Jr.

3215. Lane, Harlan. (Harvard U.) Control of vocal responding in chickens. *Science*, 1960, 132, 37-39.—Schedules of reinforcement were shown to control the rate of chirping by chickens in the same way as other motor responses in subhumans. Under a discrimination procedure, chickens responded selectively to the visual stimulus associated with food reinforcement for chirping. Control experiments demonstrated that food influenced the rate of responding.—S. J. Lachman.

3216. Longo, Nicholas, & Bitterman, M. E. (Bryn Mawr Coll.) The effect of partial reinforcement with spaced practice on resistance to extinction in the fish. *J. comp. physiol. Psychol.*, 1960, 53, 169-172.—African mouthbreeders learned to strike at a target for food reward at the rate of 1 trial per day; latencies of 4 groups were measured during acquisition and extinction. In a  $2 \times 2$  design, 2 other variables were introduced: (a) in acquisition, constant reinforcement vs. partial reinforcement; and (b) throughout the experiment, high drive vs. low drive. "Resistance to extinction increased with drive, and at both drive levels partial reinforcement produced less resistance to extinction than did consistent reinforcement."—W. A. Wilson, Jr.

3217. Marx, Melvin H. (U. Missouri) Resistance to extinction as a function of degree of reproduction of training conditions. *J. exp. Psychol.*, 1960, 59, 337-342.—4 groups of 9 rats each were given 3 distinctive endbox conditions during training, but food was found in only one of these. In extinction, 1 group was run with only the formerly positive endbox, a 2nd group with only one of the formerly negative endboxes, a 3rd with both negative endboxes, and a 4th with both negative and the positive. Resistance to extinction increased in the order noted. Conclusion: resistance to extinction is a function of the maintenance of instrumental motivation.—J. Arbit.

3218. Meyer, Donald R. (Ohio State U.) The effects of differential probabilities of reinforcement on discrimination learning by monkeys. *J. comp. physiol. Psychol.*, 1960, 53, 173-175.—6 monkeys with extensive prior exposure to learning problems were presented with object discrimination problems in which choice of each object was rewarded a certain proportion of the time. Ss maximized the number of rewards, consistently choosing the more often correct object even when the reward probabilities were 55-45, regardless of whether a noncorrection or an "implicit correction" procedure was used.—W. A. Wilson, Jr.

3219. Wist, E. R. (U. Missouri) Amount, delay, and position of delay of reinforcement as parameters of runway performance. *Dissertation Abstr.*, 1960, 21, 1640.—Abstract.

#### Motivation & Learning

3220. Augenstein, S. M. (U. Nebraska) Motivational properties of frustration. *Dissertation Abstr.*, 1960, 21, 1623.—Abstract.

(See also Abstract 3217)

## COMPLEX PROCESSES

3221. Bliss, William D. (U. Florida) **The role of perceptual cues in the delayed reaction.** *J. comp. physiol. Psychol.*, 1960, 53, 176-179.—Albino rats were tested in a modification of the McCord 4-choice delayed-reaction apparatus with delays of up to 1 min. Ss that ran with a distinctive design on each of the doors of the apparatus were significantly more accurate in their responses at all delay intervals than a control group for which the doors were all white.—W. A. Wilson, Jr.

3222. Blomquist, A. J. (U. Wisconsin) **Variables influencing delayed response performance by rhesus monkeys.** *Dissertation Abstr.*, 1960, 21, 1634.—Abstract.

## DEVELOPMENTAL PSYCHOLOGY

3223. Haimowitz, Morris, & Haimowitz, Natalie R. (Eds.) **Human development: Selected readings.** New York: Thomas Y. Crowell, 1960. xiv, 799 p. \$4.25.—80 articles concerning development from infancy to adolescence are presented. All have previously appeared in print. The selections are divided into 5 parts: Goals, Infancy, Childhood, Distorted Views, and Planned Intervention. Suggestive of the diversity of authors and approach are the following selections: One Man's Family: David and Absalom, II Samuel 13-15, 18; The Nature of Love, Harry Harlow; Industry versus Inferiority, Erik Erikson; The Mammal and His Environment, D. O. Hebb; and How to Read Li'l Abner Intelligently, Brodbeck and White. Charts are given which correlate this book with 15 different elementary textbooks.—S. L. Ornstein.

3224. Pease, Damaris, & Hawkes, Glenn R. **Direct study of child-parent interactions: II. Observation and parent-child interaction.** *Amer. J. Orthopsychiat.*, 1960, 30, 453-459.—The increasing emphasis on direct observation as a research tool is discussed. Through direct observation the dynamic qualities of interaction can be studied. Observers must be trained; they need to understand the function of the categories determined upon or the level of objectiveness of the diary record.—R. E. Perl.

3225. Weir, Alastair J. **A developmental measure of fact-value differentiation.** *Vita hum.*, 1960, 3, 65-82.—This is an experimental evaluation of Werner's theory of developmental psychology which predicts that progressive development is associated with increased differentiation between factual and evaluative judgments. "Subjects were asked to rate 18 emotionally loaded statements as 'true-untrue' . . . and as 'favourable-unfavourable' . . . it was found that the predicted relationship between factual and evaluative judgments" does exist at all levels but that the relationship decreases with the higher-level Ss, "indicating a greater degree of fact-value differentiation."—J. L. Yager.

(See also Abstract 3385)

## INFANCY

3226. Ferreira, Antonio J. **The pregnant woman's emotional attitude and its reflection on the**

**newborn.** *Amer. J. Orthopsychiat.*, 1960, 30, 553-561.—By means of a statistical study the author shows that deviant behavior in the newborn is associated with "negative" attitudes in the mother as expressed by a higher score on a scale of Fear of Harming the Baby, and by an "either extreme" score on a scale of Rejection of Pregnancy. These results tend to confirm the hypothesis of the existence of a prenatal environment and its influence on the behavior of the infant.—R. E. Perl.

3227. Kulka, Anna; Fry, Carol, & Goldstein, Fred J. **Kinesthetic needs in infancy.** *Amer. J. Orthopsychiat.*, 1960, 30, 562-571.—A kinesthetic drive exists in infancy. It is separate from and of equal importance with the oral drive and predates the oral drive. There are many vicissitudes this drive may encounter, such as early severe deprivation which may lead to hypo- or hypermotility.—R. E. Perl.

(See also Abstract 3292)

## CHILDHOOD

3228. Fodor, Renee. (American Found. Religion & Psychiatry, NYC) **The impact of the Nazi occupation of Poland on the Jewish mother-child relationship.** *Yivo Annu. Jewish soc. Sci.*, 1956-57, 11, 270-285.—Under the stress of the imminent death of their children, "mothers reacted according to their main personality characteristics, background, emotional stability, and their attitude towards death." Case studies of 3 types of reaction: estrangement, unrealistic denial, refusal to separate from the child even in death. Children reacted primarily to the state of mind of their mothers. Illustrated by 4 case studies: the child who became a behavior problem; the aggressive child; the passive, over-matured child; the fearful, withdrawn child.—S. Glasner.

3229. Fraisse, Paul, & McMurray, Gordon. **Étude génétique du seuil visuel de perception pour quatre catégories de stimuli.** [A genetic study of thresholds of visual perception for four categories of stimuli.] *Année psychol.*, 1960, No. 1, 1-9.—3 groups of girls were tested on the perception of geometrical figures, 3-letter words, meaningless syllables, and reproductions of familiar objects. The threshold lowers with age especially between 7 and 9 yr., and especially as concerns verbal material. Threshold values vary systematically with the categories of stimuli. These differences find their explanation in 3 factors: relative frequency of stimulation, simplicity of forms, and minimum distance between figure and object. The greater the part these factors play, the lower the threshold becomes.—L. A. Wauck.

3230. Gan'kova, Z. A. (Pedagogical Inst., Leningrad, USSR) **Deistvie, obraz i rech v myshlenii detei doskol'nogo vozrasta.** [Action, image, and speech in the thought of the preschool children.] *Dokl. Akad. Pedag. Nauk RSFSR*, 1959, No. 6, 75-77.—It is commonly admitted that thought development passes through 3 stages: visual-practical, perceptual-imaginal, and verbal reasoning. These stages coincide with 3 developmental stages of preschool age. The present investigation carried out with 90 preschool children of age 3-7 shows that there is no one-to-one relationship between thinking and

age. There are degrees and levels of thinking development within the same age group.—*A. Cuk.*

3231. Ghent, L., Bernstein, L., & Goldweber, A. M. Preferences for orientation of form under varying conditions. *Percept. mot. Skills*, 1960, 11, 46.—"Sixteen pairs of the realistic and geometric forms . . . were presented to S while he was standing with his head between his legs, and S pointed to the picture that was upsidown. In 9 of the 10 preschool Ss, the predominant choices of 'upside-down' were for those pictures that were upsidown with respect to the position of the eye, or to the direction of eye movements that would be required to scan the form in a cephalo-caudal direction. This result is in striking contrast to the findings for adults which have suggested that the phenomenal upright is more likely to be determined by environmental cues than by eye orientation."—*C. H. Ammons.*

3232. Inselberg, Rachel Marzan. (Columbus, O.) The causation and manifestations of emotional behavior in Filipino children. *Child Development*, 1958, 29, 249-254.—Observations regarding situations causing emotional behavior, manifestations of emotional behavior, and reactions of adults in dealing with these episodes are reported for 2 age groups of Filipino children, 2-4 and 5-7 years of age. Findings are discussed and interpreted in relation to the Filipino culture.—*B. Camp.*

3233. Jersild, Arthur T. (Teachers Coll., Columbia U.) *Child Psychology*. (5th ed.) Englewood Cliffs, N. J.: Prentice-Hall, 1960. xxi, 506 p. \$9.75.—The emphasis in this revision, as was true of the 4th edition (see 28: 8590), is on "the concept of the self as an essential feature in the study of all aspects of a child's perception of things, [on] the beginnings of self-awareness and [on] the factors which affect self-perception." 2 new chapters have been added which seek "to give a balanced account of ways in which parents and children mutually influence one another."—*W. J. Meyer.*

3234. Jones, Harold E. (U. California, Berkeley) Intelligence and problem solving. In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 700-738.—Mental abilities first increase and then decrease with age, though experience may compensate at the upper intellectual levels. Intellectual decline varies inversely with education and shows up less on verbal than on performance tests. Longitudinal studies, made on superior populations, show less decline than cross-sectional studies. Abilities which peak early decline early. More intellectual occupations seem associated with smaller decline. Vocabulary remains relatively stable with aging and is used in measuring deterioration. Creativity declines and brain dysfunction increases with aging. Memory difficulties seem to be primarily with recent memory. Physical and mental changes of aging seem correlated. (97 ref.)—*B. S. Aaronson.*

3235. Kagan, Jerome. (Antioch Coll.) Socialization of aggression and the perception of parents in fantasy. *Child Development*, 1958, 29, 311-320.—The hypothesis that fantasy stories of extremely aggressive boys would contain more hostility be-

tween parent and child and less dependency on adults than the stories of nonaggressive boys was tested by comparing the stories told to pictures and answers to direct questions of boys rated by teachers as most and least aggressive. Confirmation of this hypothesis from story themes along with answers to direct questions is interpreted in terms of learning and practicing prohibitions on aggression in a context of dependency on parents perceived as nurturing and gratifying.—*B. Camp.*

3236. Kobasigawa, Akira. (U. Ryukyus, Okinawa) Sex-role preference in Okinawan preschool children. *Psychologia*, 1959, 2, 124-127.—"103 boys and 104 girls, ages ranging from 5-2 to 6-10, were tested by a masculinity-femininity scale . . . constructed by revising the original 'It Scale for Children.' . . . Significant mean and median differences between boys and girls were found, indicating the existence of dichotomous sex-role preference patterns."—*C. T. Morgan.*

3237. Luria, A. R., & Rozanova, V. A. Nabludeniya nad razvitiem proizvol'nogo deistviya v rannem detstve: Soobshchenie III. O formirovaniy orientiruyushchei roli rechi u detei predshkol'nogo vozrasta. [Observations of the development of voluntary action in early childhood: Communication III. Formation of the orienting role of speech in preschool children.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, No. 6, 59-62.—Study of the orienting influence of verbal instruction and its developmental stages before it becomes a full-fledged regulator of behavior. Ss were 55 children (age 1½-3 years) who were taught to find a coin hidden either under a cup or a glass relying only on the verbal directions. The results show that the orienting effect of verbal instruction is weak at early ages and only at the age of 3 approaches the strength of the orienting influence of a visual stimulus.—*A. Cuk.*

3238. McCullough, Constance M. (San Francisco State Coll.) Implications of research on children's concepts. *Read. Teacher*, 1959, 13, 100-107.—The definitions, process of formation, and factors influencing the development of concepts are summarized from the literature on children's concepts. Interpretations are made by means of examples of common experiences of children. A number of suggestions based on these findings are made regarding what teachers can do in several areas to further concept development: use of materials, building understandings, motivation, group learning experiences, means of exploring concepts, fostering acquisition of concepts, and application. (39 ref.)—*C. Wurtz.*

3239. Maw, Wallace H., & Maw, Ethel W. (U. Delaware) The relationship between curiosity and scores on a test of general information. *ARQR J.*, 1960, 2(1), 27-32.—"It was hypothesized that children with high curiosity amass a larger store of general information than do children of the same tested intelligence who have less curiosity. The hypothesis was tested by selecting groups of children of high and low curiosity and comparing their scores on a test of general information. The curiosity groups were established on the basis of teacher- and peer-judgment with intelligence statis-



tically controlled. The groups were similar in age, popularity, and tested intelligence. A test of general information, consisting of items based on material in encyclopedias available to the children, discriminated in favor of the high-curiosity group."—*Author summary.*

3240. Melikian, Levon. (American U. Beirut, Lebanon) **Preference for delayed reinforcement: An experimental study among Palestinian Arab refugee children.** *J. soc. Psychol.*, 1959, 50, 81-86.—"One hundred and seventy-two refugee children were given the Draw-A-Man test. They were promised an immediate payment of 10 fils (Jordanian money) for their drawings and double that amount if they preferred to wait for two days. Seventy-five Ss asked for immediate payment and 97 preferred to wait." It was found that "the difference between the means of the 'immediate' and the 'delayed' groups on the IQ as revealed by the drawing was significant at the .05 level. This suggested the possibility that the more intelligent Ss tend to prefer delayed over immediate reinforcement."—*J. C. Franklin.*

3241. Morland, J. K. **Educational and occupational aspirations of mill and town school children in a southern community.** *Soc. Forces*, 1960, 39, 169-175.—Educational aspiration is lower for the mill children than for the town children, but occupational aspirations are not significantly different. Mill children reveal relatively high aspirations and expectations but "the mill-village setting mitigates against fulfilling the . . . American dream of getting ahead."—*A. R. Howard.*

3242. Terrell, Glen. (U. Colorado) **The need for simplicity in research in child psychology.** *Child Develpm.*, 1958, 29, 303-310.—The author discusses some of the difficulties and inconsistencies encountered in studying relationships at the complex level in child psychology and points to the potential benefit arising from "increased concern . . . with understanding behavior in its more basic forms."—*B. Camp.*

(See also Abstracts 3104, 3292, 3322, 3492)

#### Learning

3243. Berlin, I. N. (U. California, San Francisco) **Aspects of creativity and the learning process.** *Amer. Imago*, 1960, 17, 83-99.—In several instances schizophrenic children were found to have parents who were talented people with creative potential never fully realized. This calls attention to the problem of creativity and the inhibiting factors which result from the child's experiences with adults. The role of the teacher in fostering creativeness is considered.—*W. A. Varvel.*

3244. Gladis, Michael. **Grade differences in transfer as a function of the time interval between learning tasks.** *J. educ. Psychol.*, 1960, 51, 191-194.—The purpose of this study was to investigate transfer in 3rd-, 5th-, and 7th-grade children in a verbal learning task when the time intervals between 2 tasks were varied at 5 minutes, two days, and 14 days. A significant difference in amount of transfer was obtained between the 3 groups with the meaningful paired associates learning used. No

significant differences were obtained between the different time intervals.—*W. E. Hall.*

3245. Jeffrey, Wendell E. (U. California, Los Angeles) **Variables in early discrimination learning: I. Motor responses in the training of a left-right discrimination.** *Child Develpm.*, 1958, 29, 269-275.—Although the task of labeling stimuli differing in spatial (right-left) orientation was essentially impossible for the majority of 4-year-olds, learning to press buttons oriented in the direction of the figures used as stimuli was readily attained "by all Ss in the experimental group and this . . . was found to have a significant effect on subsequently learning to apply labels."—*B. Camp.*

3246. Muehl, Siegmur. **The effects of visual discrimination pretraining on learning to read a vocabulary list in kindergarten children.** *J. educ. Psychol.*, 1960, 51, 217-221.—The objective of this study was to determine the effect of visual discrimination pretraining on learning to read a vocabulary list. 37 children from kindergartens were randomly assigned to 3 pretraining groups. Group S learned to match the same words that appeared in the vocabulary list; Group D matched different words, and Group F matched geometric forms. The learning response in 12 tests of correct anticipations of the vocabulary list showed that Group S performed significantly better than the other 2 groups—D and F—but there was no significant difference between D and F. The results show that word-recognition skill is related to the development of specific visual discrimination skills.—*W. E. Hall.*

3247. Osipow, Samuel H. **The effects of verbal mediation on the modification of children's attitudes.** *J. educ. Psychol.*, 1960, 51, 199-207.—The purpose of the study was to determine the effect of verbal mediation on the acquisition of preferences. 56 4th-grade children were divided into 4 groups, and each group was given different treatment. Ss learned to connect their most and least preferred color name to nonsense figures. Ss labeled most and least preferred color names with positive and negative evaluative names. Finally, all groups were required to rank preferences for the nonsense figures. It was found that groups did not differ in rate of acquisition of color names for nonsense figures. Preference for nonsense figures was related to the positive or negative nature of the evaluative word. Because the control group showed shifts equivalent to experimental groups, results were interpreted to only partially support a mediation hypothesis.—*W. E. Hall.*

3248. Terrell, Glen, Jr. (U. Colorado) **The role of incentive in discrimination learning in children.** *Child Develpm.*, 1958, 29, 231-236.—Differences in the effectiveness of token incentive, promised reward, and immediate reward were studied with respect to children's performance in the learning and transposition of a button-pushing response to a size discrimination task. The lack of difference observed between control group Ss and Ss in the token incentive and immediate reward groups is discussed along with hypotheses concerning the inhibiting effect promised incentive was observed to exert.—*B. Camp.*

(See also Abstract 3879)

## Abilities

3249. Chambers, Jack A. (Board Education, Lansing, Mich.) Preliminary screening methods in the identification of intellectually superior children. *Except. Child.*, 1959, 26, 145-150.—"The problem resolved itself into finding . . . measures which would correlate highly with the WISC . . . and which could be used as prescreening devices for reducing individual testing time. . . . The Primary Mental Abilities Test, Elementary Form, was found . . . most desirable. . . . Further analysis . . . found that . . . the non-intellectually superior children who had 'passed' the PMA screen could be eliminated . . . by using the VIBS subtests of the WISC as a screen following the PMA screen, before administering the WISC Full Scale. . . . The saved testing time could be used to provide psychological services to more schools."—A. Barclay.

3250. Hurley, J. R. (Michigan State U.) Maternal attitudes and children's intelligence. *J. clin. Psychol.*, 1959, 15, 291-292.—An attempt to resolve an apparent contradiction in 2 previous works. (see 19: 3415; 33: 2154)—F. N. Arnhoff.

3251. Hurst, John G. (U. Minnesota) A factor analysis of the Merrill-Palmer with reference to theory and test construction. *Educ. psychol. Measmt.*, 1960, 20, 519-532.—6 identifiable orthogonal factors were derived from Merrill-Palmer scale results from a group of 100 superior children between 36 and 42 mon. old. 3 of the factors accounting for over half of the variance are not found in scales used to measure intellect at later ages. The factors are: willingness to cooperate, fine motor coordination, and persistence. The other 3 factors (finding relations, perceptual speed, and space) are usually included in tests of intellectual ability. The data obtained in this study suggest what is needed to improve the validity of preschool intelligence scales.—W. Coleman.

3252. Klausmeier, H. J., Check, J., & Feldhusen, J. (U. Wisconsin) Relationships among physical, mental, achievement, and personality measures in children of low, average, and high intelligence at 125 months of age. *Amer. J. ment. Defic.*, 1960, 65, 69-78.—There were 40 children in each of the 3 IQ groupings. The factors of IQ, reading, arithmetic, language, and handwriting were found to be correlated with strength of grip, with achievement in relation to expectancy, and with integration of self-concept. Poor achievement in arithmetic and reading is not associated with a low level of physical development or with uneven physical development.—V. M. Staudt-Sexton.

3253. Kuroda, Jitsuo. (Seiwa Junior Coll., Japan) Application of the Colored Progressive Matrices Test for the Japanese kindergarten children. *Psychologia*, 1959, 2, 173-177.—The test is a series, in order of difficulty, of 36 matrices or abstract designs, from each of which a part has been removed. Test data and correlation statistics are given. The test is said to be simple to administer, suitable for cross-cultural comparisons and for mentally defectives, to be relatively independent of achievement, and to motivate Ss. The Crichton Vocabulary Scale was used with the test to add cul-

tural attainment to a general intelligence score.—D. Bryan.

3254. Luria, A. R., & Yudovich, F. Ia. Speech and development of mental processes in the child: An experimental investigation. (Trans. by O. Kovasc & J. Simon) London: Staples, 1959. 126 p. 15s.—The speech development of 2 male identical twins was investigated. The twins were of normal intelligence but markedly retarded in their speech. At the age of 5 they were removed from their "twin situation" and placed into 2 separate kindergartens. One of the twins received special speech training for a period of 3 months. After that the training was interrupted for 2 months and then resumed for a further 6 months. After a period of 10 months both twins showed an improvement in speech, particularly the twin who had received training. In addition, "cardinal improvements in the structure of the twins' mental life" were observed, a fact which, according to the authors, can be attributed only "to the influence of the one changed factor—the acquisition of a language system."—A. Cuk.

3255. Trippe, Matthew J. (Syracuse U.) The social psychology of exceptional children: II. Factors in society. *Except. Child.*, 1959, 26, 171-175.—Cultural pressures for success with minimal personal resources for attaining such success may result in personality disorganization among handicapped groups. Furthermore, present cultural attitudes toward the handicapped stem from earlier historical periods when handicapped persons were a threat to society because they could not produce goods or services and reduced the availability of already scarce necessities of life without themselves contributing any material help to society. This attitude is changing, although slowly. (15 ref.)—A. Barclay.

(See also Abstract 3718)

## Personality

3256. Fox, Cynthia; Davidson, Kenneth; Light-hall, Frederick; Waite, Richard, & Sarason, Seymour B. (Yale U.) Human figure drawings of high and low anxious children. *Child Developm.*, 1958, 29, 297-301.—Human figure drawings were obtained from 32 matched pairs of school age children who differed in anxiety scores. Significant differences were observed between high anxious and low anxious children on the 6 variables scored.—B. Camp.

3257. Hartup, Williard W. Nurturance and nurturance-withdrawal in relation to the dependency behavior of preschool children. *Child Developm.*, 1958, 29, 191-201.—E's verbal approval served as the reward on 2 learning tasks presented to 2 matched groups of 4-year-olds. Prior to introduction of the tasks, 1 group was "consistently nurtured during a 10-minute period of interaction" while the 2nd group had 5 minutes of nurturant interaction with E followed by 5 minutes of "non-nurturant response" from E. "It is felt that . . . results support the hypothesis that nurturance-withdrawal supplies greater motivation than consistent nurturance for children's behavior which is designed to gain the reassurance of adults."—B. Camp.

3258. Hoashi, Kiyoko. (Kawamura Junior Coll., Japan) Need as a function of frustration. *Psy-*

*chologia*, 1959, 2, 183-185.—Groups of kindergarten children were frustrated by preventing them from taking pretty discs. Conclusions: "(1) The need tended to be stronger as the frustration period became longer. (2) The longer the frustration period, the wider was the variances and ranges of need among subjects, which means the greater the individual differences. (3) Educational influence decreased when frustration was stronger."—D. Bryan.

3259. Iscoe, Ira, & Stevenson, Harold W. (Eds.) **Personality development in children.** Austin, Tex.: Univ. Texas Press, 1960. viii, 171 p. \$4.00.—Consists of a series of 6 papers that were presented at the University of Texas in 1958 for the purpose of providing a sample of current research in the area of personality development in children. The topics and participants were as follows: "The Longitudinal Method," Harold E. Jones; "Prediction of Future Adjustment," John E. Anderson; "Interdisciplinary Research," Milton J. E. Senn; "The Development of Conscience," Robert R. Sears; "Development Through Identification," John W. M. Whiting; and "The Learning of Roles in Personality," Orville G. Brim, Jr.—D. G. Brown.

3260. Kaplan, A. M., & Hafner, A. J. (Washington U. School Medicine) **Manifest anxiety in hospitalized children.** *J. clin. Psychol.*, 1959, 15, 301-302.—"A comparison of anxiety levels as measured by the Children's Manifest Anxiety Scale was made between surgical and non-surgical 10, 11, and 12 year old hospitalized children and a control group of children attending public schools. No significant differences in measured anxiety levels were found between the different groups."—F. N. Arnhoff.

3261. Muuss, Rolf. **The relationship between "causal" orientation, anxiety, and insecurity in elementary school children.** *J. educ. Psychol.*, 1960, 51, 122-129.—2 tests were given to determine the level of causal orientation that existed in 259 5th- and 6th-grade students. A causal orientation is defined as an understanding of the forces that operate in human behavior. High causal oriented Ss show more security and less anxiety than low causal oriented Ss. The differences could not be explained on the basis of intelligence.—W. E. Hall.

3262. Penny, Ronald. **Age and sex differences in motivational orientation to the communicative act.** *Child Developm.*, 1958, 29, 163-171.—Interview data showing age and sex differences in children aged 12-17 in desire to communicate information process. Relation to socialization is discussed.—B. Camp.

3263. Perkins, Hugh V. **Factors influencing change in children's self-concepts.** *Child Developm.*, 1958, 29, 221-230.—Using Q sort technique, the author obtained a self-sort and an ideal-self-sort 3 different times in a 6-month period from 251 4th- and 6th-grade children from 8 classrooms in 7 elementary schools. Changes in the correlation between each child's self-sort and his ideal sort were studied in relation to 4 independent teacher and classroom variables (see Perkins, Hugh V. Teachers' and peers' perceptions of children's self-concepts. *Child Developm.*, 1958, 29, 203-220). Self-ideal-self congruency was observed to increase through time. Greater congruency was observed in girls, in 6th graders,

and in children whose teachers completed a child-study program. Findings are related to the educational process.—B. Camp.

3264. Perkins, Hugh V. **Teachers' and peers' perceptions of children's self-concepts.** *Child Developm.*, 1958, 29, 203-220.—Using Q sort technique and sociometric questionnaires, the author obtained teachers' and peers' perceptions of the self-concepts of 4 children from each of 8 classrooms in 7 elementary schools. The correspondence between these measures and the expressed self-concept was analyzed in relation to the following 4 factors: (a) teacher participation in an in-service child study program, (b) classroom climate measured by Withall's Climate Index, (c) teacher acceptance of self and others measured by Reed's Sentence Completion Test, and (d) grade level. The author concludes that (a) "exerts the greatest influence on teachers' and peer groups' achieving increased correspondence between their perceptions of and children's expressed self-concepts."—B. Camp.

3265. Peterson, Donald R. (U. Illinois) **The age generality of personality factors derived from ratings.** *Educ. psychol. Measmt.*, 1960, 20, 461-474.—". . . a correlational test of factor similarity was applied to the results of the studies by Cattell, et al., and while the authors' conclusions were sometimes supported, the degree of resemblance between child and adult factor patterns was generally unimpressive." 2 factors of high relative variance were extracted which were interpreted as general neuroticism and introversion-extraversion. The previous studies had involved adults, 11 year olds, and 7 year olds. The present study added 4 year olds rated by teachers.—W. Coleman.

3266. Sarason, Seymour B., Davidson, Kenneth; Lighthall, Frederick, & Waite, Richard. (Yale U.) **Classroom observations of high and low anxious children.** *Child Developm.*, 1958, 29, 287-295.—Direct classroom observations of 32 matched pairs of grade school children who differed in anxiety scores revealed differences between high and low anxious children and between boys and girls. Results are discussed in relation to other findings on the same Ss.—B. Camp.

3267. Sarason, Seymour B., Davidson, Kenneth; Lighthall, Frederick, & Waite, Richard. (Yale U.) **Rorschach behavior and performance of high and low anxious children.** *Child Developm.*, 1958, 29, 277-285.—Rorschach protocols were obtained from 32 matched pairs of grade school children who differed in scores on the Test Anxiety and General Anxiety scales. Results indicate differences between high and low anxious Ss and between boys and girls.—B. Camp.

3268. Schoenfeldt, Betti K. **Um teste coletivo de personalidade para crianças pre-escolares.** [A group-personality test for preschool children.] *Rev. Psicol. norm. patol., Sao Paulo*, 1960, 6, 129-140.—A "Projective-Collective Test" was administered to 300 children between the ages of 6 and 7, from 1949 to 1959, in order to determine their maturity level and to provide a measure of their social and emotional adjustment. The test has 8 tasks, 4 of which involve the coloring of figures representing what the child would like to be, like to make, like to have, and

would like to be if it were not a human being. The 4 other figures require the drawing of a house, filling in the space between a mother and father figure, finishing a half circle, and signing the name. Preliminary data are presented.—G. Soloyanis.

3269. Smock, Charles D. (U. Pennsylvania) **Perceptual rigidity and closure phenomenon as a function of manifest anxiety in children.** *Child. Develpm.*, 1958, 29, 237-247.—A relationship between relatively high manifest anxiety, shorter latency on cognitive and perceptual closure tasks, and greater frequency of response to a previously reinforced stimulus was hypothesized. The Children's Manifest Anxiety scale was administered to 118 5th-grade children. "Measures of cognitive-perceptual closure and rigidity were individually administered to the upper and lower 20 per cent of those Ss (Experiment I). Four months later a second series of tasks were administered to the total group of Ss and the results obtained from the upper, middle, and lower 20 per cent of the CMAS were analyzed (Experiment II). The results generally confirmed the predicted relationships between manifest anxiety and perceptual rigidity and closure phenomenon."—B. Camp.

(See also Abstract 3817)

#### ADOLESCENCE

3270. Anderson, H. H., Anderson, G. L., Cohen, I. H., & Nutt, F. D. (Michigan State U.) **Image of the teacher by adolescent children in four countries: Germany, England, Mexico, United States.** *J. soc. Psychol.*, 1959, 50, 47-55.—"The story-completions to one of the Anderson Incomplete Stories given by 3178 children" in four countries were used to test the hypothesis that "responses from children in a more dominating or authoritarian culture will be different from those of children in a more integrative or more democratic culture." Because the hypothesized cultural difference in "image of the teacher" was supported by analyses of story completions "it is concluded that the Anderson Incomplete Stories is an instrument sensitive to cross-national similarities and differences."—J. C. Franklin.

3271. Baranyai, Erzsebet, & Lenart, Edith. **Az irasbeli kozles gondolatlelektani vonasai.** [Thought psychological traits in written communication.] Budapest, Hungary: Akademiai Kiado, 1959. 316 p.—5 essays written by the authors on the dynamics of logical thought processes in written communications of children 10-14 years of age are included in this book. Titles of the essays are: ["Thinking during Draft Preparation: The Structuring and Condensation of the Content"], ["The Thought Process: Introduction and Conclusion"], ["Logical Connections in the Smaller Parts of the Content"], ["Variations in the Expression of Thought Continuity"], and ["The Personal and Impersonal Tone in the Composition"]. (French summary)—E. Friedman.

3272. Braen, B. B., & Wallen, N. E. **Measurement of rigidity in high school students.** *Psychol. Rep.*, 1960, 7, 11-17.—"To assess the reliability of the Wesley and SDI inventories for a high school sample, to compare the scores of the high school group with scores previously obtained with college students, to examine the relationship of the Wesley scale to the SDI total score and subscores, and to examine

the relationship between each of the rigidity measures and the Lorge-Thorndike Test, Non-Verbal Battery . . . 283 high school students [were tested]. Odd-even reliabilities were lower for the high school Ss who were also significantly lower in manifest rigidity. There were no significant sex difference. . . . The SDI total score and Wesley scale appeared to measure the same variable, the similarity being greatest between the Hom-Het item set and the Wesley scale. . . . A significant positive relationship was found between scores on the two rigidity inventories and those on the intelligence test. These results were in direct contrast with those for the college sample."—C. H. Ammons.

3273. Eichorn, Dorothy H., & McKee, John P. (U. California, Berkeley) **Physiological instability during adolescence.** *Child Develpm.*, 1958, 29, 255-268.—"Physiological data from the files of the Adolescent Growth Study have been analyzed in terms of chronological age and in terms of physiological maturity in an effort to test the hypothesis that adolescence is characterized by a temporary decrease in physiological stability. For systolic and diastolic blood pressure and for pulse rate intra-individual variability increases throughout the period from 12 to 17 or 18 while variability in BMR decreases. Variability in body temperature shows little systematic change. Aside from these over-all slopes, no evidence of a temporary period of heightened variability was found for girls and only a slight indication was found for boys."—B. W. Camp.

3274. Ghosh, Molina. **Fantasy life of girls at the pre-adolescent and adolescent stages.** *U. Rajasthan Stud. (Educ.)*, 1958, 3, 54-82.—10 unstructured inkblots and 20 cards (F) of TAT were administered to 2 groups of preadolescents (106 Ss) and adolescents (104 Ss). An intelligence test was also given, and the Ss were required to write autobiographical accounts. Both groups showed concern for family, and aggression was revealed in the inkblot and TAT story contents. The preadolescent girl seemed to be happier. The adolescent girl showed eroticism. There was a rise of self-asserting tendency in the adolescent girls.—U. Pareek.

3275. Howard, Linda P. **Identity conflicts in adolescent girls.** *Smith Coll. Stud. soc. Wk.*, 1960, 31, 1-21.—This study supports Ericson's belief that the core conflict of adolescence is identity vs. identity diffusion, and that the following subsidiary conflicts can be subsumed under this main one: self-certainty vs. identity consciousness, time perspective vs. time diffusion, anticipation of achievement against paralysis, and sexual identity vs. bisexual diffusion.—G. Elias.

3276. Kogler, Ronald R. (U. Southern California Medical Center) **Chronic illness and the adolescent.** *Ment. Hyg.*, NY, 1960, 44, 111-114.—Based on the case history of an adolescent boy. Because of normal adolescent preoccupation with the body image, changes in the family pattern or a weakening of family relationships may lead to emotional reactions and to the development of symptoms of chronic illness.—M. A. Seidenfeld.

3277. Marshall, Helen R. **Prediction of social acceptance in community youth groups.** *Child Develpm.*, 1958, 29, 173-184.—A sociometric test was



given to 270 girls in 23 home economics 4-H clubs and 87 boys and 47 girls in 8 agriculture 4-H clubs in the same Illinois county. Results confirmed 4 hypotheses: "(a) In child or youth groups, age has a positive, low correlation (.15-.20) with sociometric status. (b) Sociometric status in both sex groups is higher for girls than for boys. (c) Level of performance or achievement in the skills and knowledge essential for or being taught to the group is positively related to sociometric status. (d) Sociometric status in one group has a positive and fairly high correlation (.50-.60) with sociometric status in groups of different membership."—*B. Camp.*

3278. Meyer, William J. (U. Pittsburgh) **The stability of patterns of primary mental abilities among junior high and senior high school students.** *Educ. psychol. Measmt.*, 1960, 20, 795-800.—"The Primary Mental Abilities Test, Age 11-17, was administered to one hundred children as they began the eighth grade. The test was readministered as the subjects concluded the eleventh grade. Correlations between corresponding subscores at each grade level and between total score at grade eight and specific abilities at grade eleven permit the conclusion that prior measure of an ability predicts subsequent performance on that ability somewhat better than the total score (a measure of general ability). This is particularly true of the N and S abilities. Patterns of subscores on each ability in grade twelve were found to be clearly dependent upon subscore patterns obtained in grade eight."—*W. Coleman.*

3279. O'Hara, Robert P., & Tiedeman, David V. (Boston Coll.) **Vocational self concept in adolescence.** *J. counsel. Psychol.*, 1959, 6, 292-301.—Self-concept theory is applied to vocational development by means of an empirical formulation. The areas of aptitude, interest, social class, and values were investigated in a group of 1021 boys attending a private Catholic day school. Stages in the clarification of vocational self-concepts utilized the criteria of discreteness, dominance, and irreversibility. "... our data indicate increasing clarification of self concepts in four vocationally relevant areas." Other findings are noted.—*M. M. Reece.*

3280. Peck, R. F., & Havighurst, R. J., Cooper, Ruth; Lilienthal, J., & More, D. **The psychology of character development.** New York: Wiley, 1960. xviii, 267 p. \$6.50.—A motivational theory of character structure and development is proposed on the basis of the 2nd of 2 studies of adolescent character development, an extensive longitudinal study using both projective and objective tests and observations of 34 children from their 10th to 17th year in a small midwestern city. Individual character is found to be "a persisting pattern of attitudes and motives which produce a rather predictable kind and quality of moral behavior." The structure of character is the product of learning. The relative influences and limitations on this process are defined. A 54-page appendix gives detailed description of methodology and data instruments.—*C. M. Scott.*

3281. Srivastava, Champa. **Some aspects of growing of adolescent Barela girls.** *Vidya Bhawan Stud.*, 1956-57, 5, 76-81.—A study of 18 tribal girls in the age group of 12-17 was made for the following aspects of growing up: cultural setup, the status

of the girl in the community, early education, adolescent's participation in economic activities, the family life, and adolescent's sex and marriage. The techniques adopted were participant observation, interviewing informants, and examination of related studies. The result showed that the community is agricultural and is organized on a partilineal pattern. The community is disintegrating. The girls contribute an equal share to the economic welfare of the family.—*U. Parcek.*

#### MATURITY & AGING

3282. Anderson, John E. (U. Minnesota) **The use of time and energy.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 769-796.—Aging results in efficiency of behavior at the cost of variability. Man is an energy system producing activity directed by a coupled control system. Spontaneous activity increases during growth, but probably declines after maturity. With development, there is a stabilization and ordering within and among systems of behavior. The content of and arrangement of learned patterns of behavior in time is affected by the culture. Work is a major nucleus of life activities. Quality of creative output is highest in youth, but quantity remains high throughout life. Interests remain stable throughout life. Although older people retire, they must find new activities to replace the old. (54 ref.)—*B. S. Aaronson.*

3283. Berner, P., & Hoff, H. **Krisen des Alternens.** [Crises in aging.] *Vita hum.*, 1959, 2, 165-190.—The growing proportion of aged persons in practically all countries is becoming such a serious problem that preventive measures are required to control disturbances and maladjustments common in old age. This paper presents an evaluation of the physical and mental characteristics of normal and pathological aging. Psychological problems in old age are investigated by way of the analysis of the social background and psychodynamics of the individual old person. Mental disturbances in old age can be thought of in psychosomatic terms, i.e., that psychological problems hasten the breakdown of cerebral tissue leading to further deterioration and maladjustments.—*J. L. Yager.*

3284. Birren, James E. (National Inst. Mental Health, Bethesda, Md.) **Principles of research on aging.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 3-42.—Chronological age is an important tool for classifying data about people. While age is not a manipulative variable, systematic differences between old and young enable experimental comparison. This section deals with concepts of social, psychological, and biological age; the usefulness of various research designs and statistics in the study of aging; criteria for evaluating research; and implications for studying changes in the organization of behavior. (55 ref.)—*B. S. Aaronson.*

3285. Botwinick, Jack. (National Inst. Mental Health, Bethesda, Md.) **Drives, expectancies, and emotions.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 739-768.—Comparative study of behavioral plasticity limits of aging organisms would aid in evaluation and development of procedures to maximize productive output of the elderly. Studies in a number of

different modalities suggest a tendency for decline in drive with age. Older people require more preparatory time to make a response. The deterioration in expectancy functions is related to theory of brain damage. Age changes in emotional expression are difficult to assess without first knowing what normal aging is like. Older individuals may withhold responses in situations calling for novel acts because of a need for greater accuracy. (76 ref.)—B. S. Aaronson.

3286. Braun, Harry W. (U. Pittsburgh) **Perceptual processes.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 543-561.—Old age brings a decline in auditory sensitivity, visual efficiency, and visual acuity, but also brings more benefit from increased illumination. There is an increase in the thresholds for sweet, vibration, pain, and corneal sensitivity. Tolerance for cold and heat decreases. Elderly individuals show decreased perceptual speed and have greater difficulty in discriminating ambiguous stimuli. (89 ref.)—B. S. Aaronson.

3287. Burgess, E. W. (Ed.) **Aging in western societies.** Chicago Univ. Press, 1960. xvi, 492 p. \$7.50.—This book is one of 3 that has resulted from plans of an Inter-University Council in Social Gerontology to provide comprehensive reference work in the field of aging. It covers major developments in western Europe and Great Britain. There are 3 parts, the 1st comprising 11 chapters. These chapters discuss cultural influences, population trends, employment, income, housing, health, family, leisure, and research. The editor has a final chapter of résumé and implications. Part II consists of 14 selected case studies, each prepared by an individual author; and Part III is made up of 15 selected actuarial-type statistical tables.—J. Botwinick.

3288. Busse, Ewald W. (Duke U.) **Psychopathology.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 364-399.—A review of mental disorders of particular importance in the later years with a stress on symptoms, etiology, and pathology. Presentation follows the outline of the Diagnostic and Statistical Manual of the American Psychiatric Association. The organic brain disorders are a serious medical and socioeconomic problem, but the psychogenic disorders are equally important and need to be recognized. (76 ref.)—B. S. Aaronson.

3289. Freeman, G. L. **CNS acuity in aging.** *Psychol. Rep.*, 1960, 7, 98.—20 men (10 aged 45 and 10 aged 65) participated in a pair of CNS "acuity" tests. "One measured simple serial reaction times, the other speed and accuracy in making more complicated serial responses to a bifurcate 'stress interview' task. A significant different (t test) was indicated for the first test, with older men making slower responses. The complicated test showed no significant difference between the two groups in either speed or accuracy; in fact, there were as many high scorers among the older men in this 'stress interview' as in the younger group."—C. H. Ammons.

3290. Gerard, R. W. (U. Michigan) **Aging and organization.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 264-275.—Organisms are complex systems in space-time.

Behaving involves temporary changes in the system, often with permanent or longlasting effects. A hierarchy of being, behaving, and becoming exists. As systems become more complex, changes become more irreversible. Aging is a description of decay of systems over time, and it is important to determine the subsystem most critical for aging of the whole. More complex systems age more rapidly. Application of this model to the nervous system postdicts empirical findings of changes in psychological function with ongoing age. (41 ref.)—B. S. Aaronson.

3291. Griew, Stephen. (U. Bristol, England) **A further note on uncertainty in relation to age.** *Gerontologia*, 1959, 3, 335-338.—A previous experiment showed that in old age response latency increases whenever there are several sources from which a signal might come, even though the response is the same no matter which signal source is used. This study (using 8, 4, 2, and 1 signal sources) reports that when the duration of signal exposure is reduced below the normal reaction time, age differences in response latency disappear. An explanatory hypothesis is put forth.—L. Shatin.

3292. Hudson, Atwood. (Rockford Coll.) **Communication problems of the geriatric patient.** *J. speech hear. Dis.*, 1960, 25, 238-248.—The number of speech and hearing disorders in the 15 million individuals over 65 years of age is unknown, and research is needed to determine the incidence. Many of the deficits are serious and multiple. Rehabilitation should be multidisciplinary. Every available resource—federal, state, and local—is needed, and professional persons in the field of speech and hearing disorders should join other scientists in studying the process of aging.—M. F. Palmer.

3293. Jerome, Edward A. (National Inst. Mental Health, Bethesda, Md.) **Age and learning: Experimental studies.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 655-699.—It is usually hypothesized that aging individuals lose the ability to learn. Methodological difficulties in studying learning and aging which make for problems in evaluating this hypothesis are set forth. Data on response acquisition, retention, and transfer and interference are presented. The fact that certain factors relevant to aging are often controlled in experiments makes it difficult to decide whether or not capacity to learn does decline with age. (51 ref.)—B. S. Aaronson.

3294. Kahn, R. L., Goldfarb, A. I., Pollack, M., & Gerber, I. E. (New York State Dept. Mental Hygiene, Queens Village) **The relationship of mental and physical status in institutionalized aged persons.** *Amer. J. Psychiat.*, 1960, 117, 120-124.—A random sample of aged persons and institutions caring for them was obtained in New York City. Results showed a high degree of interrelationship between mental and physical functional status. No relationships were found between these two factors and type of institution or chronological age.—N. H. Pronko.

3295. Kay, Harry. (Oxford U., England) **Theories of learning and aging.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 614-654.—Learning theory has been too narrow and gerontology too broad to permit

much interaction. Expansion of learning theory involves a number of problems of interest to gerontology. These include: short term memory; speed of assimilation; influence of environmental experiences, early and late in life; ability to modify experiences, transfer; neurological issues; motivation; and clinical problems. (155 ref.)—*B. S. Aaronson.*

3296. Kleemeier, Robert W. (Washington U., St. Louis, Mo.) **Behavior and the organization of the bodily and the external environment.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 400-451.—Environment includes not only that which surrounds the individual but his body as well. Changes in body form with age are an important influence on behavior. Declining visual and auditory acuity create new visual and auditory environments to which the individual must adjust. The limits within which thermal and atmospheric conditions permit adaptation become increasingly circumscribed with advancing age. Other factors which influence the elderly person in his home and community are considered. Problems in the design of dwellings for the aged are noted. (127 ref.)—*B. S. Aaronson.*

3297. Kuhlen, Raymond G. (Syracuse U.) **Aging and life-adjustment.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 852-897.—The study of life adjustment in aging has been handicapped by definition and measurement problems. Individuals show a need for continued expansion in early life followed by development of ego defenses against the anxiety generated by physical and social losses. Adjustment measures should relate curvilinearly to aging. Anxiety should be essentially unrelated to aging. Increased susceptibility to life-crises should be present in the aged. Chronological age is of less importance than more personal factors in the life style of each person. Although personality has continuity, age-related changes do occur. Positive self-image and age identification, health, and socioeconomic status all influence adjustment in old age. (156 ref.)—*B. S. Aaronson.*

3298. Landahl, Herbert D. (U. Chicago) **Biological periodicities, mathematical biology, and aging.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 81-115.—While it may yet be too early for any general mathematical theories of aging, mathematical models can be applied to certain isolated problems. The role of time in biological processes is discussed. The mathematical properties of stimulus-response systems and survival rates are discussed and applied to a number of biological problems, including response patterns to afferent stimulation. There is a discussion of a number of mathematical models together with suggestions for models to predict some of the physiological and psychological effects of aging. (49 ref.)—*B. S. Aaronson.*

3299. Levinson, B. M. (Yeshiva U.) **A comparison of the Coloured Progressive Matrices (CPM) with the Wechsler Adult Intelligence Scale (WAIS) in a normal aged white male population.** *J. clin. Psychol.*, 1959, 15, 288-291.—Ss were 89 males attending golden age clubs, ages 60-84. Results suggest the feasibility of using the CPM with

such populations. Abbreviated scales are suggested.—*F. N. Arnhoff.*

3300. McFarland, Ross A., & O'Doherty, Brian M. (Harvard U.) **Work and occupational skills.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 452-500.—The efficiency of older people at work and their performance in industry is discussed. Methods of matching older people with jobs are noted. Functional age is more important in measuring abilities than chronological age. Changes in vision and audition are most likely to affect performance. Psychomotor skill decline causes slowing which is compensated by greater accuracy. Degenerative changes in mental ability are compensated by increased judgment. Individuals should be matched to their job in line with their changing abilities. Older workers' performance on a job depends on the job. No good methods for training the aging working population have as yet been evolved. (103 ref.)—*B. S. Aaronson.*

3301. Magladery, John W. (Johns Hopkins Hosp., Baltimore, Md.) **Neurophysiology of aging.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 173-186.—Apart from special sense organs, peripheral degeneration in end organs and nerve pathways account for only a small fraction of the increase in motor response times in the old. Evidence of aging changes in the functioning of the nervous system itself will soon come from physiological studies in man. Though latency changes in simple tendon reflexes seem little affected by aging, regulation of their thresholds by varying psychological conditions may alter with aging. More studies of segmental mechanisms operating at spinal cord and brain stem levels is needed. Studies of aging in larger animals seem a prime necessity. (69 ref.)—*B. S. Aaronson.*

3302. Pollack, R. H. **Figural after-effects as a function of age.** *Acta psychol., Amst.*, 1960, 17, 417-423.—The purpose was to test the developmental hypothesis deriving from the theory of cortical satiation and to show the actual pattern of chronological development of this phenomenon. The hypothesis indicated by the satiation concept was not confirmed. However, significant changes in the frequency of occurrence of figural aftereffects with age were demonstrated. A notion of a single underlying process must be rejected. An explanation in terms of a change with age in the processes underlying figural aftereffect is proposed.—*G. Rubin-Rabson.*

3303. Riegel, Klaus F. (U. Hamburg, Germany) **Personality theory and aging.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 797-851.—Serious methodological problems exist in relating personality theory to aging. The inclusion of time and stimulus repetition is of special significance. Personality theories differ among themselves with respect to what they conceive as the major dimension of personality, and personality itself is undefined. Experimental approaches and operational methods need to be adopted for the study of these problems. Systematization of theoretical variables is needed. It may be better to study subsystems than the total personality at the present time until greater knowledge permits integration into a single system. Greater formaliza-

tion may be a first step towards this goal. (230 ref.)—B. S. Aaronson.

3304. Simon, J. Richard. (State U. Iowa) **Changes with age in the speed of performance on a dial setting task.** *Ergonomics*, 1960, 3, 169-174.—"24 subjects, age 18-34, and 16 subjects, age 59-85, made both fine and gross adjustments of dials. The older group required an average of 45% longer to adjust the dials, but only 14% longer to travel between dials. Speed of travel varied with the nature of the preceding and subsequent tasks."—B. T. Jensen.

3305. Sjögren, Torsten, & Larsson, Tage. (Caroline Inst., Stockholm, Sweden) **The changing age-structure in Sweden and its impact on mental illness.** *Bull. WHO*, 1959, 21, 569-582.—In a study of senile psychoses in Sweden, "No sign was discerned of a trend towards an increasing morbidity-risk for senile psychosis in the different age-groups, the increasing number of admissions to hospitals being due to other, mainly social and economic, causes." The conclusion is reached that in Sweden "the increased economic burden created by the growing number of old persons can largely be offset by an increase in the relative number of able-bodied persons in the higher age groups."—J. C. Franklin.

3306. Talland, George A. (Harvard U. Medical School) **Facilitation of accurate perception by anticipatory sets: The progressive effects of aging.** *Gerontology*, 1959, 3, 339-350.—2 groups of Ss (ages 65-89) and 1 group of men and women (ages 20-40) were required to give vocal reproductions of stimulus words presented at the individual's threshold of intelligibility. Anticipatory sets facilitated accurate auditory perception in all age groups, but accuracy diminished with age. Age effects appeared first when the task involved either rapid shifting from one set to another or the formulation of a new set while a previous expectancy was still in operation. Caution in making responses increased with age.—L. Shatin.

3307. Townsend, Peter. (London School Economics & Political Science, U. London, England) **Social surveys of old age in Great Britain, 1945-58.** *Bull. WHO*, 1959, 21, 583-591.—From 33 surveys conducted between 1945 and 1958 investigating the social needs and circumstances of old people, "the fact emerges that family ties are stronger than is perhaps realized and that most of the aged live a reasonably secure life within their families." However, "a small minority exists whose distress is evident and who do not seem to be contacted by social welfare agencies." In a discussion of how the needs of this group can be met, "it is suggested that the pattern of home and welfare services should be based less on administrative tradition and more on the way of life of the people."—J. C. Franklin.

3308. Von Mering, Otto, & Weniger, Frederick L. (U. Pittsburgh) **Social-cultural background of the aging individual.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 279-335.—Older persons in modern society have usually been employed by large corporations and have obtained economic security through organizational systems of social security. Retirement is based on actuarial fixed age limits. Smaller families

and increased occupational and geographical mobility have shifted responsibility for care of the aged from family to public. There is little opportunity for active participation after retirement. Increased life expectancy is accompanied by boredom and the prospect of prolonged physical debility and terminal incapacity. (152 ref.)—B. S. Aaronson.

3309. Weiss, Alfred D. (National Inst. Mental Health, Bethesda, Md.) **Sensory functions.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 503-542.—Since almost all sensory functions decline with age, there is a loss in the quantity and quality of available information. The decrement affects various modalities differently so that compensation is possible. Changes may be neural or nonneural. According to the most powerful hypothesis, neural changes involve reduction in nerve cell populations which reduces channel capacity. Signal transmission becomes slower with age. The dispute over whether aging is a disease seems primarily semantic. Environmental manipulation to help adaptation seems indicated in the aged. (152 ref.)—B. S. Aaronson.

3310. Welford, Alan T. (St. John's Coll., Cambridge U., England) **Psychomotor performance.** In James E. Birren (Ed.), *Handbook of aging and the individual* (see 35: 703). Pp. 562-613.—Performance among older people is limited more by central than by peripheral mechanisms. There may be some compensation from reduced rate of performance. Performance changes become more marked as tasks increase in complexity. An important cause of difficulty is interference with short-term retention by intervening activity. Given the chance, older people shift emphasis from speed to accuracy. The relation of age changes in sensorimotor performance to other variables is briefly reviewed, and implications for industry are noted. (87 ref.)—B. S. Aaronson.

(See also Abstracts 2974, 3143, 3174, 3186, 3339, 3521, 3663, 3701, 4059, 4092, 4211)

## SOCIAL PSYCHOLOGY

3311. Bauer, Raymond A. (Harvard Business School) **N + 1 ways not to run a railroad.** *Amer. Psychologist*, 1960, 15, 650-655.—Although "attacking what I consider to be a series of simplistic fallacies in thinking about social control, it is my intention to encourage a responsible realistic discussion of the issues." One fallacy is that it is possible to establish a completely unchanging social order, a "total state" which once established will continue running in unchanging form. "A second fallacy in thinking about social control in the 'total state' is that the major problems are those of political loyalty." A third fallacy is "the tacit assumption that the problem of social control is solely one of the control of individual behavior." The determinism versus free-will controversy is irresolvable. Complete determinism "can never be proven or disproven for one reason: our knowledge is and must always be finite."—S. J. Lachman.

3312. Hartley, Eugene L., & Wiebe, Gerhart D. (Eds.) (City Coll. New York) **Casebook in social processes.** New York: Thomas Y. Crowell,



1960. xii, 534 p. \$3.75.—The contents of this book come entirely from official records of hearings conducted by committees of the United States Senate or House of Representatives, except for some introductory pages and several paragraphs of orientation that precede each topic dealt with by the hearings. The authors' purpose is to bring the student of the behavioral sciences into contact with behavioral-science problems and processes as they appear in the deliberations of the United States Congress. The following topics were covered in the hearings reviewed: bills concerning the provision for a standardized version of "The Star-Spangled Banner," brainwashing, the small farm, urban renewal in selected cities, civil rights, juvenile delinquency, Klamath Indians of Oregon, and the world situation.—R. M. Frumkin.

3313. **Lauterbach, Albert.** (Sarah Lawrence Coll.) **Man, motives, and money: Psychological frontiers of economics.** (2nd ed.) Ithaca, N. Y.: Cornell Univ. Press, 1959. xii, 312 p. \$5.00.—This book concerns "the psychic processes that determine . . . important happenings in economic life." It attempts to answer the questions: (a) What non-economic factors influence business behavior? (b) Can economic reforms hope to reduce the social causes of personal insecurity? (c) Does economic reform presuppose a different kind of human being? ". . . the time has not come to formulate a general theory of economic psychology. Yet the need is great for . . . such insights as are available today." (250-item bibliogr.)—C. A. Bennett.

3314. **Lewis, Donald J.** (Louisiana State U.) **Stimulus, response, and social role.** *J. soc. Psychol.*, 1959, 50, 119-127.—"The primary purpose of the . . . paper has been to determine what antecedent and consequent (stimulus and response) events the term 'role' refers to. Whether or not the suggested definition of 'role' is accepted, the attempt to reduce the term to observables is valuable for at least two reasons: (a) It makes clear that the subject matter of large areas of social sciences is the same; (b) It is a necessary step in determining the extent to which the principles of learning psychology are useful for social psychology."—J. C. Franklin.

3315. **Maslow, Abraham H. (Ed.)** **New knowledge in human values.** New York: Harper, 1959. xiv, 268 p. \$4.50.—This volume, with foreword by Pitirim A. Sorokin, contains papers presented at a conference on human values organized by the Research Society for Creative Altruism and held at the Massachusetts Institute of Technology in 1957. A paper by Sorokin attributes to love a gigantic potential power. The philosopher R. S. Hartman argues that a science of value is a theoretical possibility, and the philosopher H. Margenau discusses the scientific basis of value theory. The physical scientist G. Bronowski discusses the values which are presupposed by scientific activity. L. von Bertalanffy and T. Dobzhansky discuss different aspects of the biological perspective on value theory. A. H. Maslow, G. W. Allport, Erich Fromm, and Kurt Goldstein offer their respective philosophies of values derived from a background of social, psychological, or psychiatric interests. G. Kepes discusses the special values of art; D. T. Suzuki, values in Zen; and W. Weisskopf and P. Tillich each offer

an existential philosophy of values. D. Lee presents a viewpoint based on her research in cultural anthropology. A 2nd part of the volume contains discussion and biographical notes.—R. F. Creggan.

3316. **Quarantelli, Enrico L.** (Ohio St. U.) **Images of withdrawal behavior in disasters: Some basic misconceptions.** *Soc. Probl.*, 1960, 8, 68-79.—Misconceptions about 3 images of withdrawal behavior, that of panic, dependency, and control, are discussed in terms of their theoretical and practical implications. Even under severe stress people do not become completely irresponsible (panic) or totally impotent (dependent); rather they seek in conjunction with others to solve their withdrawal problems in those ways that appear most reasonable to them as they view the situation. (50 ref.)—R. M. Frumkin.

3317. **Roe, Anne.** **Syracuse Scales of Social Relations.** *Personnel guid. J.* 1960, 39, 310.—Test review.—S. Kavruck.

(See also Abstracts 2967, 3255)

#### CULTURAL FACTORS

3318. **Alfert, Elizabeth.** (U. California, Berkeley) **A multiple score personality test administered to German and Austrian students: Cross-cultural vs. intra-cultural differences.** *J. soc. Psychol.*, 1959, 50, 37-46.—Comparisons of scores of Vassar College students with those of small samples of German and Austrian students indicate that "intercultural differences . . . were less significant than personality differences within each culture."—J. C. Franklin.

3319. **Arkoff, Abe.** (U. Hawaii) **Need patterns in two generations of Japanese Americans in Hawaii.** *J. soc. Psychol.*, 1959, 50, 75-79.—Results of Edwards Personal Preference Schedule administrations to samples of 2nd and 3rd generation Japanese Americans were compared with each other and with an American "normative" group. "Differences between the several groups suggested an acculturation process with the third generation Japanese Americans intermediate between the second generation group on one side and the American normative group on the other."—J. C. Franklin.

3320. **Bagh, D.** (Santiniketan, India) **An experimental study of Rorschach characteristics of different cultural groups of rural Bengal.** *Indian J. Psychol.*, 1958, 33, 55-66.—Tables are given for Rorschach results on 4 different cultural groups: Group A, an uneducated, low-prestige group; Group B, an educated, high-prestige group; Group C, a 9th-grade adolescent group; and Group D, a Muslim group otherwise comparable to Group B.—C. T. Morgan.

3321. **Barnes, J. A.** **Future developments in anthropological studies.** *Aust. J. Psychol.*, 1960, 12, 21-33.—Various specializations within the field of anthropology are discussed with particular reference to the current situation in Australia.—P. E. Lichtenstein.

3322. **Boesch, Ernest E.** **The Bangkok project, step one.** *Vita hum.*, 1960, 3, 123-124.—"The author sketches the importance of cross-cultural psychology for personality theory and for applied psychology. He then describes the main working features of

the International Institute for Child Study in Bangkok, an institution for comparative research in child psychology. After showing the problems he met as a director of this institute, he gives the main outline of the first research step, carried out in the years 1956 to 1958. Based on the survey of results available up to now, methodological principles and important problem-areas of cross-cultural research are outlined.—*Author summary.*

3323. Fishman, Joshua A. (Yeshiva U.) **American Jewry as a field of social science research.** *Yivo Annu. Jewish soc. Sci.*, 1958-59, 12, 70-102.—Jews constitute a very sizeable proportion of America's social scientists. It is therefore all the more strange that very few social scientists have taken American Jewry as an object of scientific study. This would require special preparation, regarding which the author offers several suggestions. He discusses more fully some of the difficulties in concepts and in methodology and outlines some sources of "good" hypotheses. He also suggests a number of research possibilities.—*S. Glasner.*

3324. Leblanc, M. **Personnalité de la femme katangaise: Contribution à l'étude de son acculturation.** [Personality of the Katanga woman: Contribution to the study of her acculturation.] Louvain, Belgium: Publications Universitaires, 1960. 403 p. FB 380.—A comparison between more acculturated (Elisabethville) and less acculturated (Kolwezi) in the Katanga province of the Congo. Cultural data on adult life and child training are presented as background. A Sentence Completion Test was prepared to elicit responses relevant to cultural differences, especially in relations between the sexes. Applied to both sexes, it showed the expected variation with degree of acculturation, and also with sex (women, of interior position in Katanga custom, were more European in their attitudes than were men). A Thematic Apperception Test was prepared and given to women only in the 2 communities. The more acculturated show superiority on formal characteristics and to some extent in content measures intended to reflect adequacy of adjustment. Detailed comparisons are made on a number of need and press variables. Protocols are presented (in French, the language used by some of the Ss) for 6 Ss on both tests, and for 8 additional Ss on the Sentence Completion Test alone. The history of the 2 tests, including cross-cultural use, is reviewed at length.—*I. L. Child.*

3325. Lehrer, Leibush. (Yivo Inst. Jewish Research, NYC) **Problems of the Jewish ethnic character.** *Yivo Annu. Jewish soc. Sci.*, 1958-59, 12, 36-69.—Preliminary discussion of the concept of "national character." Detailed discussion of the effects upon personality of changes in culture as exemplified in the contrast between traditional East European Jewish cultural patterns and those of modern American Jewish life in the areas of: values, education, leadership, intermarriage, leisure-time activities, and identification.—*S. Glasner.*

3326. Levinson, Marcia H., & Levinson, Daniel J. (Harvard U. Medical School) **Jews who intermarry: Sociopsychological bases of ethnic identity and change.** *Yivo Annu. Jewish soc. Sci.*, 1958-59, 12, 103-130.—A study of 11 Jewish men and 5 Jewish women married to Protestant or

Catholic spouses, using 2 semistructured interviews, a 6-card Thematic Apperception Test, a Sentence Completion Test, and a set of projective questions. 2 groups of Ss ("the reluctant" and "the emancipated") dealt with inner conflicts in differing ways. For "the reluctant" their intermarriage was a form of "neurotic exogamy." For "the enlightened" it was part of a general process of assimilation.—*S. Glasner.*

3327. Malinowski, B. **A scientific theory of culture and other essays.** New York: Oxford U. Press, 1960. x, 228 p. \$1.50.—A paperback edition of a book first published in 1944.—*C. T. Morgan.*

3328. Simmons, Ozzie G. (Harvard U.) **Ambivalence and the learning of drinking behavior in a Peruvian community.** *Amer. Anthropologist*, 1960, 62, 1018-1027.—In the village district of Lunahuana, social drinking by men is defined as an integral part of the culture, and drunkenness is accepted in a wide range of situations. For these timid, evasive, shy men, the thing to do is urge your friends to become drunk, after which they will feel shame at their incorrect behavior. Women and pre-adolescents should not drink. To understand this behavior we may trace the acquisition of both positive and negative attitudes regarding drinking during adolescence.—*R. L. Sulzer.*

3329. Smith, M. G. (University Coll., West Indies) **Education and occupational choice in rural Jamaica.** *Soc. econ. Stud.*, 1960, 9, 332-354.—The facts reveal a formidable gap between reality and desire, between occupational opportunities, expectations, and aspirations for rural Jamaican youth. Idealization of many occupations therefore results in a great amount of frustration, demoralization, and anomie. (6 tables)—*R. M. Frumkin.*

3330. Voget, Fred W. (U. Toronto) **Man and culture: An essay in changing anthropological interpretation.** *Amer. Anthropologist*, 1960, 62, 943-965.—The issue of man's nature—how it influences his cultural behavior and how, in turn, learned social behavior can modify his basic nature—hovers in the background of explanations of culture patterns and of how culture changes. Historical review of anthropological conceptualizations, from 19th-century psychogenic evolutionism, to historical interactionism, culturalism, functionalism, holism, and synthetic interactionism, shows that when the interpretation of culture has changed, the explanation of man's relation to culture has moved into line and vice versa. (119 ref.)—*R. L. Sulzer.*

(See also Abstracts 3232, 3270, 3281, 3308, 3347, 3351, 3420, 3440, 3450, 3593, 3960)

#### STATUS & CLASS DIFFERENCES

3331. Khan, J. M. **An investigation into social attitudes.** *Vidya Bhawan Stud.*, 1955-56, 4, 1-8.—An adapted Bogardus Social Distance Scale was used to study social distance among some religious and communal groups. The prestige ranking of 22 occupational groups by 116 students was obtained. In-group feeling about one's caste was uniformly manifested by all groups. Results reveal a tendency for the breaking down of old rigidity and restrictions. The teacher had the highest prestige

rank followed by laborer, religious teacher, doctor, artist, and engineer. The coefficient of concordance between 9 different groups was .64.—*U. Pareek.*

3332. **Kuppuswamy, B.** (Mysore, India) **A scale to measure socioeconomic status.** *Indian J. Psychol.*, 1959, 34, 1-10.—The scale uses 3 variables—education, occupation, and income—as components. Weights are assigned to each of 7 items on each scale so as to predict the estimates of status made by experienced social workers. Social classes are divided into 5 groups.—*C. T. Morgan.*

3333. **Landecker, W. S.** (U. Michigan) **Class boundaries.** *Amer. sociol. Rev.*, 1960, 25, 868-877.—“Class boundaries are conceived as properties of a multiple system of stratification composed of several rank systems. In each system, the same population is ranked by a different criterion of status. The central question in boundary analysis is: To what extent are the incumbents of any two contiguous ranks of one rank system separated in another? The magnitude of a class boundary is measured by the degree of such separation. This method is applied to the population of Detroit and is used in testing alternative predictions derived . . . from ‘class structure’ and ‘status continuum’ hypotheses.” The results reveal “the presence of one major class boundary, by which the topmost strata are divided from the bulk of the population. Below this elite boundary, the dominant feature is a status gradation of considerable continuity. . . . The view suggested by these findings is that neither the class-structure nor the status-continuum hypothesis takes precedence over the other, but rather that each is appropriate to a different portion of the total continuum.”—*L. Berkowitz.*

3334. **McDonagh, Edward C.** (U. Southern California) **Status: A human form of tropism.** *Sociol. soc. Res.*, 1960, 44, 172-177.—Hypotheses on human behavior, not necessarily logical or intelligent but predictable if status values of culture are known, are presented. “. . . men in all cultures seem to react compulsively to status values and their symbols as if driven by a tropistic need.” The amount of effort expended is in direct proportion to reward expected, but man can select or reject status stimuli.—*C. W. Page.*

3335. **Moore, Harriett, & Kleining, Gerhard.** **Das soziale Selbstbild der Gesellschaftsschichten in Deutschland.** [The social self-image of social classes in Germany.] *Kol. Z. Soziol. Soz.-psychol.*, 1960, 12, 86-119.—Interviews with persons between the ages of 16 and 65, representing various social classes, indicates the social images members of particular social classes hold of themselves and the nature of the social stratification system in Germany. (17 ref.)—*R. M. Frumkin.*

3336. **Simpson, Richard L., & Simpson, Ida Harper.** (U. North Carolina) **Correlates and estimation of occupational prestige.** *Amer. J. Sociol.*, 1960, 66, 135-140.—Ratings of the 90 occupations selected by the NORC were made by a group of judges on the responsibility, training, education, and skill required in each occupation and showed a multiple correlation of .962 with NORC prestige scores. The personal autonomy of the jobholder added no significant explanation of vari-

ance in prestige. This finding supports the views of recent theorists and is consistent with the Davis-Moore theory of stratification. An index of occupational prestige derived from judges' ratings of the variables would mark an advance over current indexes of occupational standing.—*R. M. Frumkin.*

(See also Abstracts 3335, 3365, 3639, 3672, 3722, 4084)

#### ATTITUDES

3337. **Athey, K. R., Coleman, J. E., Reitman, A. P., & Tang, J.** (Berkeley, Calif.) **Two experiments showing the effect of the interviewer's racial background on responses to questionnaires concerning racial issues.** *J. appl. Psychol.*, 1960, 244-246.—4 interviewers, 2 Caucasian, 1 Negro and 1 Oriental, asked questions in interviews with householders and college-campus passersby. In 1 experiment, 50 respondents were questioned by each of 2 interviewers; in the other, each of 2 interviewers questioned 25 freshmen, 25 seniors, and 25 house-owners. “Both the Oriental and Negro interviewers found that people were sensitive to their racial origin. . . . [Respondents] scaled down their expressions to avoid embarrassing the interviewer of the minority race and to protect the ‘conversational bridge.’”—*J. W. Russell.*

3338. **Bartlett, Claude J., Quay, Lorene Childs, & Wrightsman, Lawrence S., Jr.** (George Peabody Coll. Teachers) **A comparison of two methods of attitude measurement: Likert-type and forced choice.** *Educ. psychol. Measmt.*, 1960, 20, 699-704.—Changes in attitudes of attendants of mentally retarded patients were measured by means of a Likert-type and a forced-choice scale. There was no significant change between pre- and post-test on the forced-choice scale, but there was for the Likert-type scale. The results are interpreted as reflecting the presence of bias in the Likert scale rather than a true shift in attitudes.—*W. Coleman.*

3339. **Bergler, Reinhold.** **Die Konstanz von Sozialstereotypen in verschiedenen Lebensaltern.** [The constancy of social stereotypes in various ages.] *Vita hum.*, 1959, 2, 149-164.—A total of 5185 Ss ranging in age from 16 to 70 years in Western Germany were asked to select from a set of photographs those representative of 2 different character traits. A modification of Thomae's Physiognomic Test was used. The results show no significant differences among the several age groups in the relationship between the test photographs and the true traits. Apparently, the stereotypes are constant from age to age and seem to reflect the conditioning of the adult from an early stage.—*J. L. Yager.*

3340. **Christiansen, Bjørn.** (Inst. Social Research, Oslo, Norway) **Attitudes toward foreign affairs as a function of personality.** Oslo, Norway: Oslo Univer. Press, 1959. 283 p. N. Kr. 15.—A comprehensive survey of the relationships between attitudes toward foreign affairs and individual psychological factors reviews the evidence supporting and contravening a range of hypotheses that invoke generalization of responses, unconscious or latent factors, frustration, insecurity, nationalism, and knowledge or information level as well as the role of social norms and reference groups as

determinants of such attitudes. By means of attitude scales and such projective techniques as the Rosenzweig P-F Study and the Blacky tests, several hypotheses were tested on samples of applicants and students at the military and naval academies in Oslo. Detailed analyses of results and English versions of the scale are included. The relationships between attitudes toward foreign affairs and personality factors are found to be complex and to depend at least on manifest aggressiveness, latent aggressiveness, and nationalism.—H. W. Riecken.

3341. Coleman, A. Lee. Social scientists' predictions about desegregation: 1950-1955. *Soc. Forces*, 1960, 38, 258-262.—Specific predictions published by social scientists are cited. Tentative evaluation of the validity of these predictions will probably "not be entirely unfavorable to [those] . . . who 'stuck their necks out.'"—A. R. Howard.

3342. Haller, A. O., & Bray, Barbara. (Michigan State U.) Attitudes of American students differentially liked by Latin American students. *Personnel guid.* J., 1959, 38, 217-221.—The study suggests that foreign students tend to like intellectually-oriented American students.—S. Kavruck.

3343. Lyle, Jack. Semantic differential scales for newspaper research. *Journalism Quart.*, 1960, 37, 559-562, 646.—"Using a collection of adjectives actually applied to newspapers by their readers, along with word-pairs from earlier research, the author devised a special set of scales" adapted from the semantic differential for measuring reader attitudes. Factor loadings for this test are described.—D. E. Meister.

3344. Peak, Helen; Morrison, H. William, & Quinn, R. P. (U. Michigan) The generalization of attitude change within a serial structure. *J. exp. Psychol.*, 1960, 59, 281-297.—"A theory is presented which attributes the nature of the response made to a stimulus being tested for generalization within a serial structure to the combined effects of (a) associations formed at the time that the stimulus-in-training is being associated with a response, and (b) the interaction at the time of testing between the response to the test stimulus and responses to other events associated with the test stimulus." The results of an experiment based upon this theory are discussed.—J. Arbit.

3345. Slusser, G. H. (U. Texas) Some personality correlates of religious orientation. *Dissertation Abstr.*, 1960, 21, 1654.—Abstract.

3346. Taylor, Irving A. (New York U.) Similarities in the structure of extreme social attitudes. *Psychol. Monogr.*, 1960, 74 (2, Whole No. 489). 36 p.—An investigation of the extent to which intense "liberalism" and intense "conservatism" are similar attitudinal manifestations. Taylor explored this relationship by comparing the perceptual closure tendencies of individuals scoring in the extreme liberal and the extreme conservative groups with regard to their authoritarian beliefs and the acceptance of ethnic minorities. The measurements were made on the F Scale, a social distance scale containing a minority subscale and an authority subscale, 2 perceptual closure scales, and a design scale. The results indicate that extreme liberals and conservatives have basic similarities. "... perceptual

closure and personal distance were interpreted as genotypes which reveal themselves in apparently opposing phenotypes."—M. A. Seidenfeld.

(See also Abstracts 3375, 3766)

#### Measurement

3347. Pettigrew, Thomas F. Social distance attitudes of South African students. *Soc. Forces*, 1960, 38, 246-253.—Data closely paralleling American findings lead to the suggestion that "racial, religious, and ethnic prejudices operate in similar ways in various Western societies." The data derive from the anonymous responses of 627 white South African college students to an ethnic attitude questionnaire.—A. R. Howard.

3348. Rambo, W. W., & Smith, C. E. (Oklahoma State U.) Instruction wording and the transitivity of comparative judgments. *J. appl. Psychol.*, 1960, 44, 289-290.—In the construction of devices for assessing attitudes and opinions, questions pertaining to item form, instruction wording, and scoring were investigated. 30 student Ss were asked to make judgments about national group names with respect to desirability as classmates, social and fraternal group members, and as dormitory roommates. "The judgment data were analyzed . . . to determine the number of violations of transitivity observed under the three instruction conditions. The results indicated that there were no significant differences noted among the three groups."—J. W. Russell.

(See also Abstracts 3644, 3752, 3998)

#### Change

3349. Carlson, E. R. Word familiarity as a factor in forming impressions. *Psychol. Rep.*, 1960, 7, 18.—After reading an article containing only common words or one with unfamiliar synonyms for 22 words, 74 Ss rated their perceptions of the author's feelings on 27 10-point scales. Use of unfamiliar words led to significantly greater liking and respect for the author than did use of familiar words, and men showed a tendency to rate the author higher than did the women.—C. H. Ammons.

3350. Oad, L. K., & Chatterjee, B. B. Influence of camping on shifting social attitudes. *U. Rajasthan Stud. (Educ.)*, 1958, 3, 19-53.—The study involved 133 students of the basic education class. The attitudes that were studied related to manual work, self-dependence, sociability, village life, organization of camp life and activities, and village customs. The results showed that camping had positive and beneficial influence on attitudes. The postcamp responses of the students were characterized by a realistic approach. The inventory used is given in the appendix.—U. Pareek.

3351. Rath, R. (Utkal U., Cuttack, India) A comparison of attitude scores on some socio-cultural and educational issues between two samples of college students after an interval of four years: (India). *J. soc. Psychol.*, 1959, 50, 57-64.—A comparison of the attitudes of 1952 and 1956 samples of Indian students on a "five-point scale towards six socio-cultural, three educational issues,



and three state nationalities belonging to neighboring states."—J. C. Franklin.

3352. Weiss, Walter, & Lieberman, Bernhardt. (Boston U.) The effects of "emotional" language on the induction and change of opinions. *J. soc. Psychol.*, 1959, 50, 129-141.—Positive and negative low and high "emotional" personal descriptions having "equivalent" cognitive content were exposed to Ss in counterbalanced order and attitude and semantic differential measures made concerning the described person. For negative-first groups emotional and nonemotional descriptions were not different in effect. For the positive-first Ss, "non-emotional" description induced more favorable evaluative judgments than did the emotional . . . similarly, for the negative-first Ss, the favorable, non-emotional counter-description produced greater change than the emotional." In addition, "the data reveal a kind of 'recency' effect; that is, the final responses of the positive-first group are less favorable to the described person than are those of the negative-first group."—J. C. Franklin.

(See also Abstract 4082)

#### GROUP PROCESSES

3353. Barlow, John A. (Earlham Coll.) Experimental demonstration of the fallacy of certainty. *Psychol. Rec.*, 1960, 10, 215-218.—"Within a small homogeneous group of college students there were disagreements held with a very high degree of certainty on both sides even on issues of seemingly determinable fact. In each instance one side or the other must seemingly be in error despite the reported certainties." Results are discussed in terms of the problems of biases with which an instructor must deal in the classroom.—R. J. Seidel.

3354. Bass, B. M. (Louisiana State U.) Measures of average influence and change in agreement of rankings by a group of judges. *Sociometry*, 1960, 23, 195-202.—"This article has presented short cuts for calculating: (a) the average agreement in rank order judgment of one member of a group with all the other judgments in his same group; (b) the changes in average agreement among these judges, assessing their coalescence or increased conformity to each other as a consequence of their interaction; and (c) the relative influence of each member upon the other members. These particular methods of measurement have been used in a variety of empirical studies testing hypotheses generated by a recently published theory of leadership and group behavior [see Bass, B. M. *Leadership, Psychology, and Organizational Behavior*]."—H. P. Shelley.

3355. Chatterjee, B. B. Geometrical properties of mutual admiration patterning. *U. Rajasthan Stud. (Educ.)*, 1958, 3, 1-18.—Ranks given by members of 2 hostels were studied to reveal mutual admiration patterns. Mathematical properties of the mutual admiration polygons were studied evolving a geometrical method of representing the data. The findings reveal that there are no sex-determined differences in admiration patterning. The variability in the distribution of the angular deviations is significant, with women showing more variability.

The mutual admiration polygons show 2 important geometrical properties: the shape of the figure and the area enclosed is interrelated with mean goodness rank, and the magnitude of the angular deviation from the theoretical ideal at the identical radical vectors also correlates highly with overall goodness rank.—U. Pareek.

3356. Cohen, David; Whitmyre, John W., & Funk, Wilmer H. (VA Hosp., Coatesville, Pa.) Effect of group cohesiveness and training upon creative thinking. *J. appl. Psychol.*, 1960, 44, 319-322.—In the formation of creative thinking groups, how well does brainstorming work? 48 Ss were divided into trained and untrained samples; and cohesive, noncohesive, and "nominal" subgroups of 2 persons each were formed, based on sociometric choice. Several hypothetical problems were discussed. An analysis of variance statistical technique was used to compare number of responses and number of unique responses between the groups. "Brainstorming by pairs of superior adults will produce more unique ideas when the groups are trained in the method and composed of people who like to brainstorm together. This is true, however, only when they are working on ego-involving problems."—J. W. Russell.

3357. de Montollin, Germaine. Réflexions sur l'étude et l'utilisation des petits groupes. [Reflections on the study and utilization of small groups.] *Bull. Cent. Etud. Rech. Psychotech.*, 1960, 9, 110-121.—"Following a previous article [see *Bull. Cent. Etud. Rech. Psychotech.*, 1959, 8, 293-310] devoted to problems involved in the use of the small group as a means of studying the individual and the group, some critical reflections are here presented upon the use of small groups as a means of action for changing attitudes, habits. . . . Criticism bears essentially upon the lack of validation of these techniques and their absence of theoretical foundation. It is shown that they are based upon conceptions of man and society that are open to discussion and that fit into a limited cultural perspective. The general conclusion calls for interdisciplinary and intercultural research."—V. Sanua.

3358. Giermak, Edwin A. (Marketing Ass. America, Chicago, Ill.) Individualism vs. the committee process. *Advanc. Mgmt.*, 1960, 25(12), 16-19.—A discussion and summarization of the problem of the loss of individualism in the committee process; conclusion.—E. Q. Miller.

3359. Goswami, Santimoy. (Kharagpur, India) A study on influence of reference group and grouping according to performance quartiles on aspiration level. *Indian J. Psychol.*, 1958, 33, 281-284.—4 groups of students were asked to estimate the score they expected to make on a cancellation test. 3 groups were told that another reference group had averaged 125 on the test. 1 reference group was postdoctoral students; another, 1st-year institute students; and the 3rd, industrial workers. Level of aspiration was inversely proportional to the prestige of the reference group.—C. T. Morgan.

3360. Jacka, M. Elizabeth. (Northwestern U.) The effect of intragroup cohesiveness upon agreement attempts between groups. *Dissertation Abstr.*, 1960, 21, 1653.—Abstract.

3361. Kanareff, V. T., & Lanzetta, J. T. Effects of success-failure experiences and probability of reinforcement upon the acquisition and extinction of an imitative response. *Psychol. Rep.*, 1960, 7, 151-166.—"The present study attempted to control confidence in ability to perform well independently of others by exposing Ss to a predesignated success or failure experience on an individual task prior to a critical task (a modification of Humphreys' light guessing situation) in which S was first exposed to a 'partner's' judgment. The sequence of 'partner's' predictions and of correct predictions in the critical task were, in fact, controlled by E. Two probabilities of reinforcement for imitation were employed, .5 and .8, i.e., 50% of the partner's choices were correct in one condition and 80% in another." Complex findings did not verify "generalizations based on current knowledge about socially neutral responses . . . [nor] support expectancy theory. . . . Better understanding of the parameters affecting expectations" is needed.—C. H. Ammons.
3362. Maier, N. R. F., & Hoffman, L. R. (U. Michigan) Quality of first and second solutions in group problem solving. *J. appl. Psychol.*, 1960, 44, 278-283.—"What effect does having a group solve a problem the second time have on the quality of group solutions? 100 students were divided into 25 groups of 4 each to 'role play the case of the Change of Work Procedures. The roles of the foreman and three workers were assigned randomly to the members of each group.' When they finished, 'they were asked to arrive at a second solution to the problem.' Although the double-solution method seemed to require little more time, the 'solution quality was generally increased without a loss of acceptance.'—J. W. Russell.
3363. Maier, N. R. F., & Hoffman, L. R. (U. Michigan) Using trained "developmental" discussion leaders to improve further the quality of group decisions. *J. appl. Psychol.*, 1960, 44, 247-251.—"To test the value of a group discussion technique, 22 students, each leading in discussions 2 groups of 3 persons each, were classified as untrained developmental leaders, trained leaders without prior experience with the case, and trained leaders who had the case previously. Recommendations about the case were given first from the point of view of the company and then from the point of view of the individual under discussion after decisions had been reached. These were compared with the E's preferred answer to the problem. 'The results of the study provide strong evidence for the power of the developmental discussion technique for producing decisions of high quality.'—J. W. Russell.
3364. Mann, John H. (New York U.) The effect of inter-racial contact on sociometric choices and perceptions. *J. soc. Psychol.*, 1959, 50, 143-152.—"78 Negro and white students were randomly assigned to 6-man groups, each of which held leaderless discussions 4 times a week for 3 weeks. During the 1st and 3rd weeks sociometric self-choices and predictions of others' choices were obtained. These were analyzed and showed that in this experimental situation inter-racial group contact reduced the use of race as a 'sociometric friendship criterion' and reduced racial prejudice."—J. C. Franklin.
3365. Merriam, Alan P., & Mack, Raymond W. The jazz community. *Soc. Forces*, 1960, 38, 211-222.—"The jazz community is regarded as 'a social grouping drawn together by specific attitudes and behaviors which stress the differences of the musician and his public from people at large.' The community is described in some detail, and a number of questions regarding it are raised.—A. R. Howard.
3366. Mondlane, E. C. (Northwestern U.) Role conflict, reference group and race. *Dissertation Abstr.*, 1960, 21, 1654.—Abstract.
3367. Oad, L. K., & Chatterjee, B. B. A study of the influence of camping on shifting social patterns. *U. Rajasthan Stud. (Educ.)*, 1958, 3, 83-102.—"The indices of group interaction, group sufficiency, group cohesion, and intergroup approach were studied in the pre- and postcamping stages. Most of the indices showed shifts indicating increased social adjustability. Some suggestions to improve the organization of camps are offered.—U. Pareek.
3368. Radlow, Robert, & Berger, Peter. (U. North Carolina) Relationship of degree of self-esteem to gossiping behavior. *J. soc. Psychol.*, 1959, 50, 153-155.—"Some evidence was found among 110 male liberal arts students in a small North Carolina college for a negative relationship between self-esteem and gossiping based on paper and pencil tests of self-esteem and self-ratings of 'readiness to inform casual acquaintances of a best friend's illness.'—J. C. Franklin.
3369. Reeder, Leo G., Donohue, George A., & Biblarz, Arturo. (U. California, Los Angeles) Conceptions of self and others. *Amer. J. Sociol.*, 1960, 66, 153-159.—"Certain aspects of the Mead-Cooley symbolic interactionist hypothesis were tested with some military personnel. It was found that persons whose self-evaluation disagrees with the evaluation rendered by the group are more likely to have a greater number of reference groups. (9 tables)—R. M. Frumkin.
3370. Richards, Max D. (Pennsylvania State U.) Effective staff meetings. *Advanc. Mgmt.*, 1959, 24(4), 18-21.—"A discussion of the composition of staff meetings, purposes served by staff meetings, and recommended procedures for greater group effectiveness.—C. T. Morgan.
3371. Trist, E. L., & Murray, H. Adoption progressive d'une organisation de travail en équipe. [Progressive adaptation of team work organization.] *Bull. Cent. Etud. Rech. Psychotech.*, 1960, 9, 153-164.—"The adaptation of work teams from small isolated groups to hewing longwall working conditions in a British coal mine is compared and observed in varying conditions. The authors emphasize the importance of prior understanding among those involved in these changes, the beneficial effect of organizing the new group on a cooption basis, the advantages in discussing salaries and working organization before the changes.—V. Sanua.

(See also Abstracts 2970, 3277, 3515, 3613)

#### LEADERSHIP

3372. Bavelas, A. (Stanford U.) Leadership: Man and function. *Admin. sci. Quart.*, 1960, 4, 491-498.—"The distinction between leadership as a

personal quality and as an organization function is made. The former is described as a special combination of personal characteristics and the latter as the distribution throughout an organization of decision-making powers. Leadership in modern organization is described as consisting "not so much in the making of decisions personally as . . . of maintaining the operational effectiveness of decision-making systems which comprise the management of the organization." *V. M. Staudt.*

3373. **Bellows, Roger.** (Rutgers U.) **Creative leadership.** Englewood Cliffs, N. J.: Prentice-Hall, 1959. xiv, 338 p. \$8.65.—Defining leadership "as the process of arranging a situation so that various members of a group, including the leader, can achieve common goals with maximum economy and a minimum of time and work," the author presents an eclectic theory of leadership with "a special meaning which includes creativeness." In developing this theoretical point of view, situations, concepts, and methods involved in the process of dynamic leadership are discussed and documented by empirical studies of human relations, group dynamics, motivation, and leadership conducted in laboratory, community, industry, military, and government settings. The 18 chapters are organized into 6 main sections: "Viewpoints"; "Human Motivation"; "Social Behaviors"; "Tension, Conflict and Leadership"; "Leadership Methods"; and "Measuring and Improving Teamwork." Topics discussed include communications, leadership selection and training, attitude change, conference leadership, and training by simulation.—*F. Carleton.*

3374. **Evans, G. C.** **Validity of ascendance measurements in group interaction.** *Psychol. Rep.*, 1960, 7, 114.—Analysis of appointed-follower activity of Ss who were observed while performing in 4-person groups is described. "Submissive followers [were] significantly less active than ascendant followers, regardless of the type of leader. . . . Ascendant followers asked significantly more questions of each other, gave more opinions and suggestions, and acted upon and rejected more suggestions than did submissive followers."—*C. H. Ammons.*

3375. **Killian, Lewis M., & Smith, Charles U.** **Negro protest leaders in a southern community.** *Soc. Forces*, 1960, 38, 253-257.—Shortly after termination of the bus boycott in Tallahassee, Florida, panels of Negro and white leaders were interviewed and the general adult Negro population of the community was sampled to obtain data chiefly concerning leadership. Changes in Negro leadership which occurred during the boycott appear to be becoming permanent because the "new" leaders "adhere rigorously to the form of militant leadership which is becoming the trend for Negroes throughout the United States."—*A. R. Howard.*

#### COMMUNICATION

3376. **Carlson, Earl R.** **Psychological satisfaction and interest in news.** *Journalism Quart.*, 1960, 37, 547-551.—Results of an experiment with 47 college students show that "news interest is related to (1) perceived usefulness of an item in attaining goals and (2) importance of the goals to the reader."—*D. E. Meister.*

3377. **Clevenger, Theodore, Jr.** **Some characteristics of the study of communication in 1960.** *J. Commun.*, 1960, 10, 163-172.—The study of communication in 1960 is described as follows: "(1) communication in 1960 displays . . . ambiguity and fragmentation; (2) a striking characteristic . . . is its rationalistic faith with an emphasis upon formalism; (3) . . . [it is] methodology-oriented rather than content-oriented; [and] (4) . . . [it is] characterized by a great proliferation of theory."—*D. E. Meister.*

3378. **Gompertz, Kenneth.** **The relation of empathy to effective communication.** *Journalism Quart.*, 1960, 37, 533-546.—This reviews the 20th century literature on the psychological concept of empathy. "The author concludes that knowledge of the empathic response is basic to an understanding of the process of communication and is necessary for developing more effective techniques of mass communication." (65 ref.)—*D. E. Meister.*

3379. **Keltner, John W.** **Communication in discussion and group processes: Some research trends of the decade 1950-1959. Part I.** *J. Commun.*, 1960, 10, 195-204.—The communication literature of the past 10 years is reviewed in relation to decision-making, group effects, leadership, motivation, size and space factors, etc. (35 ref.)—*D. E. Meister.*

3380. **Nakazima, Sei.** (Kyoto U., Japan) **A study of the sounds of American English and Japanese.** *Psychologia*, 1959, 2, 165-172.—Speech was recorded and its analysis was oriented to (a) help foreigners understand sounds, (b) discuss basic problems in understanding a foreign language, (c) explain why Japanese are poor in hearing and speaking foreign languages, and (d) help Japanese overcome these difficulties.—*D. Bryan.*

(See also Abstracts 3262, 3343, 3442)

#### ESTHETICS

3381. **Farnsworth, Paul R.** **The social psychology of music.** New York: Dryden, 1958. xiv, 304 p. \$4.50.—Within a "sociopsychological" orientation, and with the general thesis that "music must look for its explanations far more often to social science than to physical science," this work covers the following topics: musical structure, including scales, intervals, and melody; music as communication; musical taste and its measurement; musical abilities and problems of evaluating them; and applications to physical and mental therapy and to industry. A 116-item glossary is appended which defines "psychological terms for the musician and musical terms for the psychologist."—*J. Lyons.*

3382. **Horton, David L., & Mecherikoff, M.** (U. Minnesota) **Letter preferences: Ranking the alphabet.** *J. appl. Psychol.*, 1960, 44, 252-253.—"A sample of 100 college students ranked the alphabet according to their preference for the appearance of the capital letter. Rankings are presented for the total sample, and for subgroups based on age and sex. Coefficients of concordance among judges are low, but the rankings for the total sample and the age and sex subsamples appear to be quite reliable."—*Author summary.*

(See also Abstracts 3532, 3546)

## PERSONALITY &amp; ABILITIES

3383. Campbell, Donald T. (Northwestern U.) **Recommendations for APA test standards regarding construct, trait, or discriminant validity.** *Amer. Psychologist*, 1960, 15, 546-553.—It is argued that in the next edition of Technical Recommendations for Psychological Tests and Diagnostic Techniques "there should be a considerable strengthening of a set of precautionary requirements more easily classified under construct validity than under concurrent or predictive validity as presently described."—S. J. Lachman.

3384. Hutt, Max L., & Briskin, Gerald J. (U. Michigan) **The clinical use of the Revised Bender-Gestalt Test.** New York: Grune & Stratton, 1960. viii, 168 p. \$5.00.—The techniques of inferential diagnosis are applied to perceptual-motoric behavioral phenomena. Part I describes the history of the present revised test, some general problems in psychodiagnosis, methods of administration, specific test factors and their interpretation, and the principles of inferential and configurational analysis. Part II provides detailed case illustrations of psychotic and neurotic records, of a character problem, an "organic" problem, and of a case of mental retardation. Part III is concerned with the special problems of assessment pertinent to certain cases of malingering, resistance, and physical handicap. A final chapter deals with the interpretation of children's records. (14 plates, 48 ref.)—C. M. Franks.

3385. Loomis, Earl A., Jr. **The self in pilgrimage.** New York: Harper, 1960. xvii, 109 p. \$3.00.—From a broad background of theology, medicine, and psychoanalysis the Director of the Program in Psychiatry and Religion at the Union Theological Seminary offers a view of human development that uniquely blends modern psychological concepts with Judeo-Christian traditions towards a goal of more effective self-understanding and integration.—H. P. David.

3386. Madden, J. M. (U. Texas) **Context effects in evaluative judgments.** *Dissertation Abstr.*, 1960, 21, 1638.—Abstract.

3387. Rubenstein, Ben O. (Wayne State U.) **Freud and Rogers: A comparative study of two psychological systems.** *Pap. Mich. Acad. Sci. Arts Lett.*, 1959, 45, 313-325.—Freud's theory, developed from his own early experiences, is genetic, emphasizes explanation, advises detachment for the therapist and skepticism about therapeutic success, is neutral about man's goodness, and provides a rich and comprehensive psychological system. Rogers disclaims the past, extols the unlimited future, finds man good and unconditional acceptance of therapy all-powerful, yet provides little psychological insight beyond his focus on the primary of conscience and the dissociation it causes.—A. M. Barch.

(See also Abstracts 3868, 3875, 3925, 3966)

## NEW TESTS &amp; TEST CONSTRUCTION

3388. Brengelmann, J. C. (New Jersey State Colony, Woodbine) **El Test de Reconstrucción de Figuras (T.R.F.).** [The Figure Reconstruction Test (FRT).] *Rev. Psicol. gen. apl., Madrid*, 1959, 14, 515-561.—The FRT involves reproducing from mem-

ory 12 simple geometric designs. This objectively scored test can be used to study learning, stimulus arousal, and stimulus recognition. It has further implications for memory, expressive movement, fatigue, and perceptual inclusion. Test scores have high validity and reliability. Test results have been validated against personality questionnaires, psychiatric diagnoses, the presence or absence of particular emotions, age, and intelligence. Implications for cerebral disorder are also noted. (33 ref.)—B. S. Aaronson.

3389. Cohen-Seat, G., & Rebeillard, Monique. **Test Filmico Tematico: Fundamento y primeros resultados.** [The Thematic Film Test: Fundamentals and first results.] *Rev. Psicol. gen. apl., Madrid*, 1959, 14, 147-150.—A projective film test, based on the general plan of Murray's TAT. The stimulus materials are a series of film cuts showing ambiguous situations involving needs and frustrations in males and females. The primary experience so far has been with 100 cases including maladapted adolescents and normal adults. After each film, Ss are asked to describe what they have seen, what led up to it, and what will follow. Responses are analyzed in terms of formal and thematic content. The test seems valuable in elucidating dynamics, even in noncommunicative adolescents. It also helps in elucidating the nature of response to motion picture situations.—B. S. Aaronson.

3390. Comrey, Andrew L., & Soufi, Alladin. (U. California, Los Angeles) **Further investigation of some factors found in MMPI items.** *Educ. psychol. Measmt.*, 1960, 20, 777-786.—"A previously published series of factor analyses of the items within various abnormal scales of the MMPI revealed the presence of a wide variety of factors. Several of these factors were selected for study with a new sample. New items were written to measure each factor. . . . A factor analysis of 57 items designed to measure nine hypothesized factors resulted in 13 factors, nine of which could be readily identified with those hypothesized."—W. Coleman.

3391. Curie, M., & Curie, J. **A propos du test M.I.P. considéré comme un test d'évaluation de la maturité du jugement moral.** [With respect to the M.I.P. considered as a test for evaluating the maturity of the moral judgment.] *Bull. Cent. Etud. Rech. Psychotech.*, 1960, 9, 187-192.—The study is a critical evaluation of the M.I.P. (My Personal Ideas) devised a few years ago by Brunetti and Novara (Turin) and adapted in France. Results show that the M.I.P. probably measures a degree of conformity with the judgment norms of the group on which the test has been standardized.—V. Sanua.

3392. Elliott, Lois Lawrence. **Effects of item construction and respondent aptitude on response acquiescence.** *USAF WADC tech Rep.*, 1959, No. 59-362. iii, 12 p.—721 basic airmen at 3 aptitude levels were given a 50-item questionnaire with 4 kinds of test content in 1 of 3 different item formats. "Responses were scored for agreement with the item statement. Analysis of variance showed that extent of acquiescence varied with the form of the items, the content of the items, and the aptitude of the airman." Positive statements produced more acquiescence than negative statements. Items with considerable personal reference elicited less acquiescence than ques-



tions with little personal reference. Ss of lower intelligence showed more acquiescence than those of higher ability.—*M. B. Mitchell.*

3393. **Fein, Leah G.** (Stanford, Conn.) **The Three-dimensional Personality Test.** New York: International Univer. Press, 1960. xii, 324 p. \$6.75.—The book deals with the reliability, validity, and clinical implications of this projective test for measuring personality functioning. Data were gathered from 55 normal adults, 50 hospitalized mentally ill patients, 53 children in the 9-13-year range, and 31 alcoholic patients. Some of the areas covered include rationale of the test, directions for administering it, norms on rate, language, and manipulation variables, sex and intergroup differences, and testing of the limits. A scoring schedule for functional analysis as well as a sample protocol in the appendix are included. (243-item bibliogr.)—*H. Feifel.*

3394. **Gilbert, Albin R.** **Persönlichkeitsdiagnostik im Wege der Begegnung.** [Personality diagnostics through encounters with people.] *Psychol. Rdsch.*, 1960, 11, 237-253.—Based on the California Test of Personality, certain "diagnostic situations" were selected. Identification or rejection and the reaction time before making a decision in every situation were noted and taken as cues for personality evaluation. The method is demonstrated on 1 case history.—*W. J. Koppitz.*

3395. **Katz, J.** **A new figure drawing technique for diagnosis and evaluation.** *Psychoanal. psychoanal. Rev.*, 1960, 47(2), 103-105.—The patient is asked before the beginning and after termination of treatment to draw the entire figures of a nude couple on the same sheet of paper. If the patient refuses, it is not wise to press the issue; it may then be dropped as unnecessary. Associations to the drawings are of value. A careful control study is indicated.—*D. Prager.*

3396. **Krah, Ulf.** (Inst. Military Psychology, Stockholm, Sweden) **The Defense Mechanism Test: A new method for diagnosis and personnel selection.** *J. appl. Psychol.*, 1960, 44, 303-309.—By throwing TAT pictures on a screen in varying degrees of light intensity, precognitive defence organization was used to screen 412 aviation cadets. Ss drew pictures of what they saw. Protocols were rated. Validity varied by rater. The DMT is likely to increase the validity of the total test battery. (16 ref.)—*J. W. Russell.*

3397. **Parkash, Ved.** **The reliability of certain tests of practical ability: A study in comparative psychometrics.** *U. Rajputana Stud. (Educ.)*, 1958, 2, 1-120.—The investigation involved 6 tests: Pass-along, Kohs Block Designs, Cube Construction, Vincent Models, Form Relations, and Memory for Designs. The sample consisted of a homogeneous group of 122 children, the mean age being 10 years 9 months. The methods employed were test-retest, split-half, rational equivalence, and analysis of variance. Since the different methods gave different results, the blanket term "reliability coefficient" should be discarded. Suggestions for the use of new terms are given.—*U. Pareek.*

3398. **Perris, Carlo.** (Hosp. Psiquiatrico Provinciale, Cremona, Italy) **Aplicaciones en el campo clínico de la investigación del "efecto geométrico-**

**crómico."** [Applications in the clinical field of the investigation of the "geometric-chromatic effect."] *Rev. Psicol. gen apl.*, Madrid, 1959, 14, 33-40.—When normals are stimulated by intermittent light through closed eyelids, they perceive highly colored geometric images ("the geometric-chromatic effect"). When this effect is tested for in matched groups of 20 schizophrenics and 20 normals, both show the effect, although some tend to perceive achromatic form and some color only. Only schizophrenics refused to say what they had seen, and only they identified the shapes as human figures or other concrete objects. The effect seems to have value as a projective technique similar to Skinner's tautophone.—*B. S. Aaronson.*

3399. **Pichot, P., & Reiman, S.** (Centre Psychologie Appliquée, Paris, France) **Études métrologiques sur un nouveau test de niveau d'aspiration.** [Metrological studies on a new level of aspiration test.] *Rev. Psychol. appl.*, 1959, 9, 177-185.—A simple apparatus is used to present a code test. On each trial the S is asked to state the speed and accuracy with which he will encode 100 letters. Scores are given on reaction time, level of aspiration, success, judgments, discrepancies, flexibility, and responsivity. 2 series of experiments, each using 10 Ss, were run to gather information on the scoring and on the test-retest reliability. It was concluded that the test is a good one and has satisfactory reliability.—*W. W. Wattenberg.*

3400. **Sen, Tapas K., & Kundu, Ramanath.** (Calcutta U., India) **Development of a new Introversion-Extraversion inventory.** *Psychologia*, 1959, 2, 128-132.—Contains "the results of item analysis and a reliability study of a new Introversion-Extraversion inventory developed by the authors and administered on two small groups of 86 subjects each."—*C. T. Morgan.*

3401. **Tiedeman, David V.** (Harvard U.) **Geist Picture Interest Inventory.** *Personnel guid J.*, 1960, 38, 506-507.—The Geist Picture Interest Inventory is reviewed.—*S. Kavruck.*

3402. **Vidal, A., & Guérin, F.** **Le Test U. 81.** [The U. 81 Test.] *Rev. Psychol. appl.*, 1959, 9, 63-101.—The U. 81 Test consists of 28 series of 3 drawings for which the S is instructed to indicate what led to the situation and how it evolved. The elements of the responses are scored according to 54 variables involving affect, counterforces, outcomes, domains, and partners. It was standardized on a group of 113 masculine and 84 feminine Ss from diverse backgrounds. Test-retest reliability is .45. Analysis of correlations permits the isolation of 5 modalities of interaction between the individual and the environment.—*W. W. Wattenberg.*

(See also Abstract 3268)

#### INTELLIGENCE

3403. **Buel, William D.** (Pure Oil Co., Chicago, Ill.) **The validity of behavioral rating scale items for the assessment of individual creativity.** *J. appl. Psychol.*, 1960, 44, 407-412.—In the study of creativity, how would it do to have statements about creative people obtained in an unstructured interview form the basis for rating research personnel? After trial with 78 Ss, the data was subjected to linkage

analysis. 8 types of items were identified. "It was suggested that the items presented may be valid discriminators between relatively more or less creative persons in a wide variety of research areas."—J. W. Russell.

3404. Clément, F. (Centre Gérontologie Claude Bernard, Paris, France) **Contrôle d'un effet de transfert d'apprentissage sur des épreuves semblables.** [Appraisal of the effect of transfer of learning on two similar tests.] *Rev. Psychol. appl.*, 1959, 9, 103-108.—Alternate forms of intellectual efficiency tests were given to 29 Ss ranging in age from 39 to 81 years of age; the intervals between tests ranged from 5 days to 1 year. The increase in means from the 1st to the 2nd test was statistically significant; this is attributed to positive transfer of learning. Extreme care should be the rule when interpreting individual results following a retest.—W. W. Wattenberg.

3405. Coladarci, Arthur P. (Stanford U.) **An analysis of Miller Analogies Test score changes.** *Educ. psychol. Measmt.*, 1960, 20, 817-823.—Exploratory analyses were made of the relationship "between initial score and retest score on the MAT, with an appreciable interval between tests; the relationship between the magnitude of initial score and score improvement; and the relationship between test-retest interval and score improvement." The sample included 56 school administrator candidates who had taken the MAT twice with a time lapse ranging from 2 to 86 months. Significant improvement in test scores was observed, but relative score position was quite stable. Neither the magnitude of the initial score or the time interval seemed to be significant factors in contributing to the gains in scores.—W. Coleman.

3406. Fisher, G. M. (Fairview State Hosp., Costa Mesa, Calif.) **A cross-validation of Baroff's WISC patterning in endogenous mental deficiency.** *Amer. J. ment. Defic.*, 1960, 65, 349-350.—"The present study attempted to cross-validate the WISC patterning in endogenous mental defectives reported by Baroff (1959). Ranking analyses indicated that only 8 per cent of the 100 Ss showed the pattern of Object Assembly and Block Design in the top third with Similarities in the bottom third which was found in 45 per cent of Baroff's Ss. The best three-subtest pattern found in the present data was Picture Completion and Object Assembly in the top third, but this pattern was present in only 33 per cent of the Ss."—Author summary.

3407. Guertin, W. H. (VA Hosp., Knoxville, Ia.) **Auditory interference with digit span performance.** *J. clin. Psychol.*, 1959, 15, 349.—Using 48 psychiatric patients, the hypothesis was tested that the total number of digit series would be greater under silence than under sound. Negative results suggest that background sounds during the digit span test are considerably less distracting than is usually supposed.—F. N. Arnhoff.

3408. Horne, E. P., & Lane, W. P. (U. Florida) **Constancy or creativity in patterning Mosaic Test performance.** *J. gen. Psychol.*, 1960, 63, 165-170.—2 groups of college Ss were given a test-retest design at a 1-week or 3-month intervals. Men tended to be consistent more often than women. Short-interval

test-retest differences indicated slightly more consistency than long interval.—Author abstract.

3409. Korotkin, A. L. (Temple U.) **Perception and intelligence: The relationship of certain visual-perceptual skills with intelligence, age, and sex.** *Dissertation Abstr.*, 1960, 21, 1637.—Abstract.

3410. McKeever, W. F., & Gerstein, A. I. (U. Rochester) **Validity of the Hewson ratios: Investigation of a fundamental methodological consideration.** *J. consult. Psychol.*, 1958, 22, 150.—"Hewson has described a method for diagnosing brain pathology from ratios computed between Wechsler-Bellevue I weighted subtest scores. . . . Organic performance on the Hewson ratios varies systematically with age and IQ variables. Nearly a third of the variance of organic performance is associated with variance in age and IQ. The method does not differentiate the groups studied beyond a chance level; among patients with IQs below 100 it makes at least as many errors as it does correct diagnoses."—C. T. Morgan.

3411. Maxwell, A. E. (U. London, England) **Tables to facilitate the comparison of sub-test scores on the WISC.** *J. clin. Psychol.*, 1959, 15, 293-295.—F. N. Arnhoff.

3412. Meux, M. O. (U. Illinois) **The role of reasoning and spatial abilities in performance at three difficulty levels of the embedded figures task.** *Dissertation Abstr.*, 1960, 21, 1625.—Abstract.

3413. Morrison, E. J. (U. Illinois) **Effects of time limits on the efficiency and factorial composition of reasoning measures.** *Dissertation Abstr.*, 1960, 21, 1638.—Abstract.

3414. Quereshi, Mohammed Y. (U. Illinois) **Mental test performance as a function of payoff conditions, item difficulty, and degree of speeding.** *J. appl. Psychol.*, 1960, (April), 44, 65-77.—Using analysis of variance and factor analysis, the performance of 41 psychology students on the Michill General Ability Test was analyzed. ". . . the experimental manipulation of payoff conditions, difficulty, and speeding can introduce substantially important new factors of which the test constructor may or may not be fully aware. . . . The commonly held belief that, for all practical purposes, test directions provide an adequate control of the Ss motivation and/or mental set is clearly untenable."—J. W. Russell.

3415. Ross, A. O. (Clifford Beers Guidance Clinic, New Haven, Conn.) **Brain injury and intellectual performance.** *J. consult. Psychol.*, 1958, 22, 151-152.—"When patients are matched with normals on the basis of the patients' preinjury scores, the patients have significantly lower scores when tested within 12 months after brain surgery. . . . An analysis of the differences in AGCT scores for the matched pairs [on post-injury performance] shows that the patients' (preinjury) scores are significantly higher with a  $t$  of 3.23 ( $p < .01$ )."—C. T. Morgan.

3416. Sinnett, Kathleen, & Mayman, Martin. **The Wechsler Adult Intelligence Scale as a clinical diagnostic tool: A review.** *Bull. Menninger Clin.*, 1960, 24, 80-84.—The WAIS differs significantly from the Wechsler-Bellevue as a psychometric and clinical instrument. The performance subtests have been radically changed. The Vocabulary subtest is an entirely new test, administered differently,

and now much more than a measure of general information. "Shifting to the WAIS for routine clinical work requires some suspension of judgment in one's inferences about subtest scatter and the meaning of extreme IQ scores until more experience with the test has been acquired both by the individual examiner and by the whole professional group." It is a distinct improvement over the Wechsler-Bellevue.—*W. A. Varvel.*

3417. Stein, M. I., & Heinze, Shirley J. **Creativity and the individual: Summaries of selected literature in psychology and psychiatry.** Glencoe, Ill.: Free Press, 1960. 428 p. \$10.00.—More than 300 articles and books are separately summarized and arranged into chapters and sections. Chapter headings: "The Criterion and Other Problems in the Study of Creativity," "The Creative Process," "Hereditry," "The Nervous System," "Age," "Early Experiences," "Religion," "Cognitive Factors," "Personality Characteristics and Motivating Factors," "Psychopathology and Other Illnesses," "Statistical Studies," "Stimulating Creativity," and "Symposia and Surveys of the Literature."—*C. T. Morgan.*

3418. Thorp, T. R., & Mahrer, A. R. (VA Hosp., Denver, Colo.) **Predicting potential intelligence.** *J. clin. Psychol.*, 1959, 15, 286-288.—Authors differentiate between measured intelligence and potential intelligence, which is based upon additional questioning after standard test administration. Report 4 techniques for estimation of potential intelligence.—*F. N. Arnhoff.*

3419. Trehub, A., & Scherer, I. W. (VA Hosp., Northampton, Mass.) **Wechsler-Bellevue scatter as an index of schizophrenia.** *J. consult. Psychol.*, 1958, 22, 147-149.—"A Wechsler-Bellevue scatter index based upon the sum of subtest deviations from the mean subtest score was computed for a sample of schizophrenics, neurotics, and character disorders. A cutting score of 19 was used as a basis for discriminating schizophrenics from neurotics and character disorders. The accuracy of discrimination was judged against the criterion of psychiatric diagnosis. The hypothesis of 60% correct diagnoses was rejected in favor of the alternate hypothesis of 70% correct diagnoses in a sequential analysis test."—*C. T. Morgan.*

3420. Vandenberg, Steven K. (U. Michigan) **The primary mental abilities of Chinese students: A comparative study of the stability of a factor structure.** *Ann. NY Acad. Sci.*, 1959, 79, 257-304.—Scores on 35 tests, including 20 identical to those in Thurstone's Primary Mental Abilities study of United States college students, administered to 92 Chinese students studying at United States universities were factor analyzed and yielded 13 factors. Analysis of the 20 identical tests yielded congruent factors of spatial, verbal, numerical, memory, and perceptual speed. Only verbal factor correlated significantly with acculturation measures. Cultural influences help shape some of the underlying abilities, but other potentialities exist independent of one another and cultural milieu. (62 ref.)—*B. S. Aaronson.*

3421. Vernon, P. E. (U. London, England) **Intelligence and attainment tests.** London, England: Univer. London Press, 1960. 207 p. 18s.—The 1st textbook in the field of mental testing by a British

psychologist since the early '20s. It covers the main tests in common use in England. The content is sufficiently simple to be useful for teachers or others interested in education, the social sciences, or in assessing, selecting, or guiding human beings. British research is stressed where available rather than research in the United States. Major topics covered are interpretation of intelligence test results, effectiveness of coaching and practice, heredity and environment, and implications of intelligence tests.—*L. G. Schmidt.*

3422. Viaud, Gaston. (Lab. Animal Psychology, Strasbourg, France) **Intelligence: Its evolution and forms.** New York: Harper, 1960. 127 p. \$1.75.—In this short monograph the author sketches the evolutionary development of intelligence. He distinguishes intelligent from instinctive action, describes and illustrates practical intelligence as illustrated by studies of learning from animals through children to man, and finally the development and operation of logical and rational intelligence in man. 37 ref.—*R. H. Waters.*

3423. Windle, C. D., & Dingman, H. F. (Pacific State Hosp., Pomona, Calif.) **Interrater agreement and predictive validity.** *J. appl. Psychol.*, 1960, 44, 203-204.—Ss were 549 illiterate Iranian truck drivers rated for intelligence and given an individual intelligence test. To relate unreliability of ratings to validity, correlations were made between intelligence test scores and 4 groups of criterion ratings differing in reliability. The authors conclude that in the construction of rating scales, weighting of ratings by their agreement is better than by their disagreement.—*J. W. Russell.*

3424. Yagüe, Juan G., & Agullo, Arturo S. **El test de dibujo de F. Goodenough y sus interrogantes científicos.** [The drawing test of F. Goodenough and its scientific questions.] *Rev. Psicol. gen. apl., Madrid*, 1959, 14, 155-170.—Comparing teachers and psychological specialists in the reliability of scoring the Goodenough, reliability seems very high but seems considerably affected by the scorer's experience. While the items vary in difficulty, their homogeneity is low and some interfere with validity. Test-retest reliability coefficient of .846 is too low for individual prediction. Urban children do better than rural. Performance seems markedly influenced by paper size. Validity correlations are low but positive. The Goodenough has little value in predicting school success or intelligence. Separate rural and urban norms are presented based on a total sample of 2057. (43 ref.)—*B. S. Aaronson.*

(See also Abstracts 3234, 3249, 3250, 3251, 3253, 3278, 3294, 3299, 3460, 3464, 3467, 3550, 3736, 3783, 3786)

#### PERSONALITY MEASUREMENT

3425. Bair, John T., & Gallagher, Thomas J. (USN School Aviation Medical, Pensacola, Fla.) **Volunteering for extra-hazardous duty.** *J. appl. Psychol.*, 1960, 44, 329-331.—What type of man volunteers for the hazardous work of participating in studies pertaining to protection against exposure to radiation? 489 cadets volunteering under experimental conditions to be exposed to cold or radiation were compared to 665 who did not. Some were asked

to volunteer publicly and some privately. Psychological test scores and other data were used to compare the various conditions. "You can influence the amount of volunteering by manipulating the experimental conditions for volunteering." Volunteers were generally superior to nonvolunteers.—*J. W. Russell.*

3426. Burchinal, Lee G. (Iowa State U.) **Personality characteristics and sample bias.** *J. appl. Psychol.*, 1960, 44, 172-174.—Who fails to answer questionnaires? 176 college students took a questionnaire in 2 sessions; those who returned for the 2nd were compared with those who did not according to 3 scales and the Gough Home Index. "Lack of cooperation is associated with a family value orientation which emphasizes traditional male female sex roles, power relationships, and conventional morality and with personality characteristics which are related to expressions of authoritarianism, powerlessness, and anomie."—*J. W. Russell.*

3427. Cattell, R. B., & Scheir, I. H. **The objective test measurement of neuroticism, U. I. 23: A review of eight factor analytic studies.** *Indian J. Psychol.*, 1958, 33, 217-235.—*C. T. Morgan.*

3428. Franks, C. M., Souieff, M. I., & Maxwell, A. E. **A factorial study of certain scales from the MMPI and the STDCR.** *Acta psychol., Amst.*, 1960, 17, 407-416.—100 males (age 18-68) and 100 females (19-62) were exposed to MMPI and STDCR subtests as measures of neuroticism or extraversion. 3 factors emerged: a neuroticism factor characterized positively by D, C, and Pt and negatively by K; an extraversion factor characterized by R and Hy; a factor related negatively to both K and Hy. Taylor's Anxiety scale is also a measure of neuroticism.—*G. Rubin-Rabson.*

3429. Griffith, Albert V., & Fowler, Raymond D. (U. Alabama) **Psychasthenic and Hypomanic scales of the MMPI and reaction to authority.** *J. counsel. Psychol.*, 1960, 7, 146-147.—College Ss classified as psychasthenic and hypomanic on the MMPI reacted to a "request from authority" (a letter from the Assistant Dean of Men) in a manner interpreted as validating the conformity-nonconformity dimension of these scales.—*M. M. Reece.*

3430. Hillmer, M. L., Jr. (U. Washington) **Comparability of factor structure of personality items under varied instructions.** *Dissertation Abstr.*, 1960, 21, 1624.—Abstract.

3431. Himelstein, Philip, & Kimbrough, Wilson W., Jr. (U. Arkansas) **Reliability of French's "Test of Insight."** *Educ. psychol. Measmt.*, 1960, 20, 737-741.—Using general psychology students, alternate and test-retest reliability estimates were computed for French's Test of Insight. For the 2 subtests (achievement and affiliation) with males and females separate, *r*'s ranged from .02 to .70. For the alternate forms none of the *r*'s were significant. Analysis of the score distributions indicated marked positive skewness.—*W. Coleman.*

3432. Krause, M. S. **The validity of ratings.** *Psychol. Rep.*, 1960, 7, 71-79.—Difficulties in assessing the validity of ratings are discussed and means of coping with the problems suggested.—*C. H. Ammons.*

3433. Liggett, J. **Consistency in social judgments.** *Psychol. Rep.*, 1960, 7, 68.—"Advances in

ranking methods and the construction of quick scoring procedures allow a rapid assessment to be made of the consistency (i.e., the nonrandomness) of judgments in a paired comparison situation. A high Coefficient of Consistence (Kendall's zeta) indicates that a judge has a clear idea of the underlying quality when he makes his judgments and that he has given his full attention to the task." An empirical illustration is given.—*C. H. Ammons.*

3434. Messick, Samuel, & Hills, John R. (Educational Testing Service, Princeton, N.J.) **Objective measurement of personality: Cautiousness and intolerance of ambiguity.** *Educ. psychol. Measmt.*, 1960, 20, 685-698.—2 objective personality tests for measuring intolerance of ambiguity were evaluated. The tests were intended to measure the tendency to reach perceptual closure quickly and the tendency to jump to generalizations on the basis of specific information. Reliabilities of .91 and .64 were obtained. Regression analysis suggested that content ability accounted for only a small part of the reliable variance. A significant *r* of .34 was obtained between the 2 tests.—*W. Coleman.*

3435. Nakamura, Charles Y. (U. California, Los Angeles) **Validity of K scale (MMPI) in college counseling.** *J. counsel. Psychol.*, 1960, 7, 108-115.—Differences between test and retest scores on the MMPI were obtained from 125 experimental Ss and 78 control Ss in a college population. The experimental condition was considered "to warrant the assumption that the student would consider it to his advantage to present a good impression on the test." The validity of the K scale "as a corrective measure for defensive test taking attitude" is supported.—*M. M. Reece.*

3436. Pena, C. D. (Mental Health Inst., Independence, Ia.) **Influence of social desirability upon Rorschach content.** *J. clin. Psychol.*, 1959, 15, 313-316.—"Social desirability scores on the Edwards SD Scale and on a specially devised Rorschach SD scale for a group of mental patients were compared to test the hypothesis that the social desirability variable is a response tendency consistently influential throughout the range of structured to unstructured test stimuli." The hypothesis was not borne out.—*F. N. Arnhoff.*

3437. Petrovich, D. V. **The apperceptive study of psychological aspects of pain.** *Percept. mot. Skills*, 1960, 11, 57.—The effectiveness of the Pain Apperception Test in studying pain experience in a variety of contexts is summarized.—*C. H. Ammons.*

3438. Prelinger, E., Zimet, C., & Levin, M. **An Ego-psychological scheme for personality assessment.** *Psychol. Rep.*, 1960, 7, 182.—A scheme for summarizing the status of Ss' characterological development at the beginning of an experiment was described. 78 5-point scales were derived from psychoanalytic theory.—*C. H. Ammons.*

3439. Rimland, Bernard. (USN Personnel Research Field Activity, San Diego, Calif.) **Multi-dimensional scatterplotting: A graphic approach to profile analysis.** *J. appl. Psychol.*, 1960, 44, 404-406.—What increments in validity might be found from employing statistical techniques other than those of the usual linear type? The symbols for high, medium, or low for one test were put on a graph at



the meeting place for the scores on 2 other tests. "It consists of entering coded symbols on a bivariate scatterplot." The procedure was found promising.—*J. W. Russell.*

3440. **Rodd, William G.** (Western Reserve U.) **Cross-cultural use of "The Study of Values."** *Psychologia*, 1959, 2, 157-164.—A Chinese translation of the Allport-Vernon Scale of Values was administered to 765 Taiwanese and 525 mainland Chinese college-preparatory students living in Taiwan. These results were compared with those of Nasayuki Nobuchi on 52 Japanese college students and to the American standardization group. The main interest was in a comparison of the Taiwanese with the other 3 groups in the light of the Chinese, Japanese, and American cultural influences on the island. Other tests given the Taiwanese and mainland Chinese were the Cattell Culture Free Intelligence Test and translations of the mathematics and science tests of the Harry-Durost Essential High School Content Battery and of the Watson-Glaser Critical Thinking Appraisal.—*E. Y. Beeman.*

3441. **Rosen, Albert.** (U. Maryland) **Punched-card methods for item analysis in the development of structured personality scales.** *J. gen. Psychol.*, 1959, 61, 127-135.—Procedures for utilizing IBM cards in scoring the MMPI and recording the scores.—*H. Ruja.*

3442. **Shah, Saleem Alam.** (Legal Psychiatric Services, Washington, D.C.) **Predictive ability in mental hospital personnel and university students.** *J. gen. Psychol.*, 1960, 63, 185-197.—This study attempted to determine if consistent differences in predictive accuracy could be shown among judges predicting responses of 3 hospitalized mental patients to a forced-choice inventory. Judges conducted a 25-minute structured interview with the predictees. Consistency in predictive accuracy could be shown only after the more difficult items of the inventory had been eliminated. Judges who had both visual and auditory cues did not show greater accuracy than judges limited to auditory cues. Judges whose predictions were corrected as they made them showed greater predictive accuracy than those not receiving such correction. Graduate students in clinical psychology did not show significantly greater accuracy than undergraduate students.—*Author abstract.*

3443. **Smith, G. M.** (Massachusetts General Hosp., Boston) **Six measures of self-concept discrepancy and instability: Their interrelations, reliability, and relations to other personality measures.** *J. consult. Psychol.*, 1958, 22, 101-112.—"Scores on six self-concept measures were obtained for each of 24 college men. These six measures were: discrepancy between 'Self' and 'Ideal Self,' discrepancy between 'Self' and 'Social Self,' discrepancy between 'Social Self' and 'Ideal Self,' 'instability of Self,' 'instability of Ideal Self,' and 'instability of Social Self.' All six measures were found to be positively correlated with each other. Eleven of the 15 correlations were significant at the .05 level of confidence using a two-tailed test."—*C. T. Morgan.*

3444. **Sterne, David M.** (VA Hosp., Vancouver, Wash.) **Use of the Kuder Preference Record, Personal, with police officers.** *J. appl. Psychol.*, 1960, 44, 323-324.—What sort of scores do policemen

receive on the Kuder? It was tried out on 49 police officers. The scores were compared with ratings by their supervisors, "done under a nine-class forced distribution system." Scores were also compared with published norms. High and low scorers on each of the 5 scales of the Kuder Preference Record, Personal, were described. "Comparison with Kuder norm group data yielded highly significant differences in preferences for avoiding conflict and for directing others."—*J. W. Russell.*

3445. **Weiss, David J., & Dawis, Rene V.** (U. Minnesota) **An objective validation of factual interview data.** *J. appl. Psychol.*, 1960, 44, 381-385.—How valid is information obtained from interviews? 91 physically handicapped individuals were interviewed by 5 female interviewers, each having a 3-hour training period. The information for some was obtained by talking directly to the handicapped person; for others, it was obtained from an adult relative. These data were checked against agency records and employer questionnaires. "It is indefensible to assume the validity of purportedly factual data obtained by interview."—*J. W. Russell.*

3446. **Wherry, Robert J., Stander, Norman E., & Hopkins, John J.** (Ohio State U.) **Behavior trait ratings by peers and references.** *USAF WADC tech. Rep.*, 1959, No. 59-360, vi, 50 p.—"Four rating forms were developed, each using the same descriptive adjectives selected by factorial analysis of a preliminary check-list form. From the results of tryouts with [100] college students, a check-list form and a modified forced-choice form were selected for mailing to references listed by the criterion sample of [181] male undergraduate college students. Results from a 71-per-cent return of reference ratings showed that: (a) reliability, assuming an equal number of raters, was consistently lower than for peer ratings; (b) correlation with the criterion of peer nominations was markedly lower than for peer ratings, but was reasonably high for one class of raters (educators); [and] (c) the check-list rating form brought a higher proportion of returns and yielded a higher validity than the modified forced-choice form."—*M. B. Mitchell.*

3447. **Witkin, H. A.** **"Embedded figures and personality": A reply.** *Percept. mot. Skills*, 1960, 11, 15-20.—". . . criticisms made by Dana and Goocher (see *Percept. mot. Skills*, 1959, 9, 99-102) of EFT performance as a measure of personality [are questioned]. The EFT score originally recommended as a measure of perceptual field dependence shows satisfactory reliability. The picture of low reliability reported by Dana and Goocher for the TAT A and O measures seems largely a function of their failure to follow the original rating procedure, a discrepancy in scoring method between the two judges, and the use of percent-agreement data rather than the more appropriate coefficient of objectivity values to evaluate reliability. Finally, the perception-personality relationships established in our earlier studies, in which the EFT and TAT were among a number of perceptual and personality tests used, have been substantiated to a satisfactory degree."—*C. H. Ammons.*

(See also Abstracts 3077, 3128, 3263, 3272, 3317, 3324, 3394, 3721, 3758, 3839, 3848, 4054)

## Inventories

3448. Bendig, A. W. (U. Pittsburgh) **Identification of item factor patterns within the Manifest Anxiety scale.** *J. consult. Psychol.*, 1958, 22, 158.—Of 5 factors extracted, Factors "A and B found by O'Connor, Lorr, and Stafford appear to be similar to the 'neuroticism' factor identified by Eysenck, while Factor D seems to be a combination of Eysenck's 'neuroticism' and 'introversion' factors."—C. T. Morgan.

3449. Brown, F. G. (U. Missouri) **The validity of the Minnesota Counseling Inventory in a college population.** *J. appl. Psychol.*, 1960, 44, 132-136.—Simultaneous validation of personality inventory scales and their underlying constructs was attempted by comparing groups made up from 1809 college freshmen rated by their dormitory counselors. 4 scales (Family Relationships, Social Relationships, Conformity, and Leadership) differentiated between the nominated groups, least fit, best fit, and not nominated. 2 scales (Emotional Stability and Mood) worked only for girls. Only 1 (Reality) gave no indication of being valid. Overlap of raw scores between groups indicated a need for caution in interpreting individual scores.—J. W. Russell.

3450. Comrey, Andrew L. (U. California, Los Angeles) **Comparison of certain personality variables in American and Italian groups.** *Educ. psychol. Measmt.*, 1960, 20, 541-550.—Using 71 MMPI items selected to represent 21 factors determined from a series of factor analyses, 252 Italian normal and psychiatric patients were given the MMPI with an Italian translation. The responses from the Italian Ss were factor analyzed after a matrix of phi coefficients had been computed. The results showed substantial agreement with Comrey's previous American studies with the exception of the emergence of a hospitalization factor not previously identified.—W. Coleman.

3451. Gauchet, F., & Lambert, R. **La caractérolgie d'Heymans et Wiersma: Étude statistique sur le questionnaire de Gaston Berger.** [The personality typology of Heymans and Wiersma: A statistical study of the questionnaire of Gaston Berger.] Paris, France: Presses Univer. France, 1959. 66 p. NF 500.—The authors administered a 90-item questionnaire to 496 men and 258 women, divided into students at a provincial university and at the University of Paris, and a group of industrial employees. The questionnaire measures emotionality, energy level, persistence of mental impressions, size of field of consciousness, polarity, avidity, sensory interests, concern with others, intellectual curiosity. This monograph reports the results of between-group and between-sex analyses, an analysis of the homogeneity of the items within each scale, factor analyses of each of the 9 scales and of the intercorrelations between the 9 scales, and concludes with a factor analysis of the 1st 30 items relating to Heymans' typology.—S. G. Vandenberg.

3452. Guilford, J. P. **A system of primary traits of temperament.** *Indian J. Psychol.*, 1958, 33, 135-150.—A summary of Guilford's work on primary temperamental traits.—C. T. Morgan.

3453. Hammes, J. A. (U. Georgia) **Relation of manifest anxiety to specific problem areas.** *J.*

*clin. Psychol.*, 1959, 15, 298-300.—"A modified version of the Heineman Forced-choice Anxiety Scale was given to 256 college students, from whom 29 low-scoring and 29 high-scoring Ss were chosen for the administration of the Mooney Problem Check List. . . . High anxious Ss have a greater number of personal problems than do low-anxious Ss. High anxious Ss have personal problems in a larger number of behavioral areas than do low anxious Ss."—F. N. Arnhoff.

3454. Kelleher, D. (U. Washington) **The social desirability factor in Edwards' PPS.** *J. consult. Psychol.*, 1958, 22, 100.—Social desirability "played an insignificant role in item responses on the PPS."—C. T. Morgan.

3455. King, G. F., & Schiller, M. (Michigan State U.) **A research note on the K scale of the MMPI and "defensiveness."** *J. clin. Psychol.*, 1959, 15, 305-306.—"The purpose . . . was to provide information on what is measured by the K scale from a study of its concurrent validity. Data were obtained from a group of problem drivers, who were administered a battery of tests in a real life setting conducive to eliciting defensive behavior. The pattern of correlations among the tests suggested the interpretation that high scores on the K scale are more closely related to level of ego strength than they are to defensive behavior."—F. N. Arnhoff.

3456. Kundu, Ramanath. (Calcutta, India) **Some suggestions for the improvement of Bose's Neurotic Questionnaire.** *Indian J. Psychol.*, 1958, 33, 112-120.—Item analyses of the questionnaire show that very few items correlate well with the over-all score. Hence the questionnaire has poor internal consistency and cannot be a measure of the single factor of neuroticism. Factor analysis and further item analyses are suggested.—C. T. Morgan.

3457. Linden, J. D., & Olson, R. W. (State Coll. Washington) **A comparative analysis of selected Guilford-Zimmerman Temperament Survey scales with the Taylor Manifest Anxiety scale.** *J. clin. Psychol.*, 1959, 15, 295-298.—Tests administered to 428 undergraduate Ss. 3 factorial analysis of variance made from standard scores. "The GZTS Emotional Stability and Objectivity scales appear to measure the same variables that the MAS Anxiety scale is measuring."—F. N. Arnhoff.

3458. Loy, D. L. (Norfolk State Hosp., Va.) **The validity of the Taulbee-Sisson MMPI scale pairs in female psychiatric groups.** *J. clin. Psychol.*, 1959, 15, 306-307.—The present study suggests that these scale pairs are applicable to female psychiatric patients.—F. N. Arnhoff.

3459. Mehlman, Benjamin, & Rand, Martin E. (Kent State U.) **Face validity of the MMPI.** *J. gen. Psychol.*, 1960, 63, 171-178.—45 items were selected from the MMPI for 2 questionnaires (one randomly) and presented to clinical psychologists, graduate students in psychology, and undergraduates, who were asked to indicate on which of the 9 clinical scales they thought the question was weighted. Results of the nonrandom questionnaire were not better than could be expected on the basis of chance alone. The results on the 2nd questionnaire were statistically but not practically significant. The data

are discussed in terms of the diagnostic adequacy of the original criterion groups and in terms of a strictly empirical approach to science.—*Author abstract.*

3460. Spilka, B., & Kimble, Gloria. (U. Denver) **Personality correlates of Q-L differentials on the ACE.** *J. consult. Psychol.*, 1958, 22, 142.—"Altus item-analyzed certain MMP1 items against ACE Q-L differentials. Of the 566 items available, 43 met his criterion of selection, but only 26 attained statistical significance at the .05 level. . . . It was found that 30 of the 43 items exhibited scoring tendencies in agreement with those obtained by Altus. The correlation between the 43 items and the differentials was .22, revealing significance at the .05 level, and supporting Altus' 'modicum of validity' claim. Where it lies and what comprises it remains unknown."—C. T. Morgan.

3461. Stewart, Lawrence H. (U. California, Berkeley) **Modes of response on the Strong Blank and selected personality variables.** *J. counsel. Psychol.*, 1960, 7, 127-131.—Based on a sample of 821 winners and runners-up for National Merit Scholarships, the results "present a . . . consistent pattern of relationships between . . . like, indifferent, or dislike responses on the Strong Blank and the other measures of personality." Response set was not significant. The mode of response "is related in small degree to characteristic personality patterns."—M. M. Reece.

(See also Abstracts 3390, 3510)

#### Projective Methods

3462. Bouvard, Claude. **Contribution à l'étude du Test des Pyramides Colorées de Pfister.** [A contribution to the study of the Pfister Colored Pyramids Test.] *Rev. Psychol. appl.*, 1959, 9, 217-236.—The procedures, rationale, and scoring of the Pfister Farbpyramiden-Test (Colored Pyramids Test) are set forth. The results of giving the test to a sample of 60 girls and 58 mentally retarded patients are given, as are observations made over a period of 3 years. The test is found to provide a completely non-verbal projective means of exploring varied aspects of personality. To increase its precision, both theoretical and practical studies remain to be made.—W. W. Wattenberg.

3463. Chatterjee, B. B., & Shrimali, N. K. **Story completion test as projective technique.** *U. Rajputana Stud. (Educ.)*, 1958, 2, 121-142.—A method of scoring responses to completed stories is described. The degree of relationship between conformity scores derived from the stories and scores on a sociological inventory and 4 psychological tests was also studied.—U. Pareek.

3464. Clerici, M. **Il test del grappolo d'uva mediante disegno a colori: Confronti can il test di Rorschach.** [The bunch of grapes test in colors: Comparisons with the Rorschach.] *Arch. Psicol. Neurol. Psichiat.*, 1960, 21, 371-390.—Bunches of grapes that are well drawn by school boys aged 9-12 years indicate good intelligence and well developed personality. Stereotypy, bad form, and gaps between grapes indicate diminished intellectual efficiency and disturbed personality.—L. L'Abate.

3465. da Cunha, Arlindo J. Adeodato. **O psicodiagnostico de Rorschach no estudo das maes solteiras.** [A Rorschach study of the unmarried mother.] *Rev. Psicol. norm. patol.*, Sao Paulo, 1960, 6, 141-181.—2 groups of unmarried mothers were studied; 1 group had a steady companion or "protector" in the home and the other did not. It was hypothesized that the former would yield Rorschach protocols reflecting greater personal security and emotional equilibrium. The test protocols did not distinguish between the "protected" and "unprotected" mothers; but both groups were found to be anxious, insecure, depressed, with deficient emotional control, and preoccupied with anatomical and sexual concepts.—G. Soloyanis.

3466. Granick, S., & Scheffen, Norma A. (St. Christopher's Hosp., Philadelphia, Pa.) **Approaches to reliability of projective tests with special reference to the Blacky Pictures Test.** *J. consult. Psychol.*, 1958, 22, 137-141.—"In this study, the feasibility of developing reliability measures of projective tests based on the clinical aspects of the test material is considered. Using data obtained with the Blacky Pictures Test on 40 school-age children, several hypotheses are explored related to judgment, temporal, and split-half reliabilities. . . . Evidence is derived which supports the test's stability to a modest degree. . . . This study indicates that integration of varied approaches to a test's consistency may serve as an appropriate alternative" to an over-all coefficient of reliability.—C. T. Morgan.

3467. Griffin, Dorothy P. (North Carolina State Board Public Welfare, Raleigh) **Movement responses and creativity.** *J. consult. Psychol.*, 1958, 22, 134-136.—In general there is no significant difference in intelligence between creative and noncreative groups. Differences between these groups on the Control of Movement scale of Levy Movement Blots tended to be in a negative direction.—C. T. Morgan.

3468. Hamilton, J. T. (University Hosp., Saskatoon, Canada) **A study of incidental stimulus values in the Szondi Test.** *J. clin. Psychol.*, 1959, 15, 322-324.—Hypothesized that control of incidental stimulus features would result in confinement of the choices in fewer factors. "An analysis of variance showed that a significant increase in confinement occurred for both 'liked' and 'disliked' choices, but that 'liked' choices were significantly greater in this respect than the 'disliked' choices. . . . the results are in general agreement with the test theory of Szondi."—F. N. Arnhoff.

3469. Horne, E. P., & Bova, L. W., Jr. (U. Florida) **The effect of color on pattern stability in mosaic productions.** *J. gen. Psychol.*, 1960, 63, 229-232.—2 groups of 34 Ss constructed chromatic and achromatic designs with Lowenfeld titles. For 5 scoring categories (characterization, spatiality, equilibrium, bordered, and grouped) chi-square tests indicated no significant difference between chromatic and achromatic designs. Analysis of time for construction showed a significant order effect but no significant color effect. Analysis of the number of titles used showed no significant difference due to color.—*Author abstract.*

3470. Kornadt, H.-J. (U. Würzburg, Germany) **Zur Häufigkeit von Themen in TAT-Geschichten.**

[The frequency of themes in TAT stories.] *Psychol. Beitr.*, 1960, 4, 54-70.—63 stories concerning Card 1 and 76 stories concerning Card 4 have been studied. Results show that 80% of the stories contained trivial elements and more than 30% contained "usually chosen" stories. Moreover, it turned out that the criteria for "trivial" and "usually chosen" stories cannot simply be derived from the nature of the card presented. There were significant differences (between various age groups) in the frequency of themes produced in response to Card 4. (English & French summaries)—H. J. Priester.

3471. Kragh, Ulf. (Inst. Military Psychology, Stockholm, Sweden) **Pre-cognitive defensive organization: Review, discussion and preliminary operational definitions.** *Acta psychiat., neurol. Scand.; Kbh.*, 1960, 35, 190-206.—"In experiments with tachistoscopic exposure of TAT-like pictures in which a threat to the hero has been introduced, types of pre-cognitive (visual) organization previously found in compulsion neurotic and hysteric patients are identified. In addition, other types of "defensive" organization are also classified and preliminarily defined in terms of the defence mechanisms of repression, isolation, denial, reaction formation, identification with the aggressor, and turning against the self." (51 ref.)—R. Kaelbling.

3472. Langland, Lois. (U. California, Los Angeles) **Projective techniques and counseling psychology.** *J. counsel. Psychol.*, 1960, 7, 102-107.—The use of projective techniques in counseling is discussed, noting that only counselors qualified by training and experience should be permitted to use these methods. Several techniques are described and the potential usefulness of this approach is stressed.—M. M. Reece.

3473. Moya, Gonzalo. **Estudio de inteligencia, personalidad y comportamiento en un grupo de 165 soldados.** [A study of intelligence, personality, and behavior in a group of 165 soldiers.] *Rev. Psicol. gen. apl., Madrid*, 1959, 14, 615-705.—Continuation of a previously reported study relating Rorschach scores to other factors (see 34: 6039). Ambiequality, extratensiveness, O%, O+ covary with intelligence, coarctation, extratensiveness, A%, Sex %, O— vary inversely. P% is highest with average intelligence and H% and At% show no relation. Above the mental deficiency level, initial response and response times lengthen as intelligence declines. Characterization of patterns associated with intellectual levels, rural-urban patterns, and provincial origin are made. Validity studies on various deterioration indices are reported. The application of these data to behavior prediction and a discussion of results obtained so far appear.—B. S. Aaronson.

3474. Murstein, B. I., & Wheeler, J. I. (U. Portland) **The projection of hostility on the Rorschach and Thematic Stories Test.** *J. clin. Psychol.*, 1959, 15, 316-319.—"It was hypothesized that the projection of hostility on the Rorschach and on the Thematic Series would be negatively correlated. The Ss were 36 women who were breast cancer clinic patients. The hypothesis was substantiated."—F. N. Arnhoff.

3475. Phares, E. J. (Kansas State U.) **The relationship between TAT responses and leaving-**

**the-field behavior.** *J. clin. Psychol.*, 1959, 15, 328-330.—"This study was designed to test the hypothesis that frequency of leaving the field (LTF) themes on the TAT is related to overt LTF behavior." 60 college students were Ss. No relationship found.—F. N. Arnhoff.

3476. Powers, W. T., & Hamlin, R. M. (U. Pittsburgh) **A comparative analysis of deviant Rorschach response characteristics.** *J. consult. Psychol.*, 1958, 22, 123-128.—"Rapaport's material concerning deviant verbalizations on the Rorschach test was analyzed by one of the authors, and 10 continua were isolated. . . . An analysis of the characteristics of these 10 continua showed that they could be combined into four large classes, namely, intellectual disorganization, deviant content, inappropriate increase or loss of distance, and affective response. Scoring scales were devised for each of the 10 continua. . . . The scoring reliability coefficients of all four classes proved to be significantly reliable, but only five of the ten continua proved to be significantly reliable."—C. T. Morgan.

3477. Rosen, A. C. (U. California, Los Angeles) **A clinical evaluation of Eysenck's "Objective Rorschach."** *J. clin. Psychol.*, 1959, 15, 320-321.—Evaluating the appropriateness of the Ranking Rorschach as a psychiatric screening instrument on 39 alcoholics, it did not correlate significantly with clinical ratings of psychiatric illness and gave only borderline evidence of correlation with other measures of personality. Concluded that the Ranking Rorschach may not be valid for psychiatric screening purposes with alcoholics.—F. N. Arnhoff.

(See also Abstracts 3267, 3320, 3389, 3513, 3636(b), 3751(a))

#### Personality Diagnosis

3478. Alvarez Villar, Alfonso, & Narros Martin, Gabriel. **La percepción visual en las diversas entidades nosológicas psiquiátricas.** [Visual perception in the various psychiatric nosological entities.] *Rev. Psicol. gen. apl., Madrid*, 1958, 13, 739-766.—The Brengelmann-Pinillos Visual Perception Test and the Raven Progressive Matrices were administered to a mixed clinical sample of 101 patients and 35 normal controls. 13 alcoholics took the Rorschach. A variety of performance differences were observed between the normal Ss and various groups of patients. Normals and psychotics were most different on problems involving closure and restructuring visual perception. (66 ref.)—B. S. Aaronson.

3479. Arbit, J., Lakin, M., & Mathis, A. G. (Northwestern U. Medical School) **Clinical psychologist's diagnostic utilization of human figure drawings.** *J. clin. Psychol.*, 1959, 15, 325-327.—"From the responses of 19 ABEPP members and candidates it was possible to construct a scale of items clinicians employ and do not employ in interpreting human figure drawings. These scales differ in that the parameters used are largely the broad personality concepts whereas those not used refer to specific traits, defenses and diagnostic categories. The present investigation indicates that often judgments demanded in research differ from those employed in clinical usage and points to the need for



greater relatedness between them if the technique is to be properly evaluated."—F. N. Arnhoff.

3480. Barish, J. I., & Buchenholz, B. A teaching technique for inferring psychodynamics. *Psychiat. Quart.*, 1960, 34, 104-116.—In a case work-up by a beginner the 3 steps are: selection and organization of the data, inference of psychodynamic trends, and integration of the inferences. A case is presented illustrating each of these steps.—D. Prager.

3481. Beech, H. R., & Maxwell, A. E. (U. London, England) Differentiation of clinical groups using canonical variates. *J. consult. Psychol.*, 1958, 22, 113-121.—"Four measures of discrepancies in the reproduction of simple designs of drawing were taken for each individual in five groups: normal, neurotic, depressive, schizophrenic, and brain-damaged. . . . [The] technique of discriminant function analysis was applied to the data. . . . [The] differences between the groups on the canonical variate scores were not strikingly superior to those obtained on the measures before applying the statistical technique."—C. T. Morgan.

3482. Butz, G. K., Hunsicker, A. L., & Hurd, D. E. (Galesburg State Research Hosp., Ill.) A short screening test for organic deficit. *J. clin. Psychol.*, 1959, 15, 274-280.—"Two types of impairment are investigated in this paper, organic and motivational impairment. Three tests were chosen experimentally from a battery of 17 suggested by the literature as being sensitive to CNS disturbances after application of the battery to 356 Ss. Four variables from these tests were weighted in a multiple regression equation corrected for age to give reasonably effective discrimination of normal persons and patients diagnosed as schizophrenic from patients diagnosed with various forms of chronic brain syndrome." Validity and reliability reported along with additional data from 534 Ss. (15 ref.)—F. N. Arnhoff.

3483. Eskey, A., & Friedman, I. (Cleveland Receiving Hosp., O.) The prognostic significance of certain behavioral variables. *J. consult. Psychol.*, 1958, 22, 91-94.—"Two hundred psychotic patients discharged as improved were rated on verbal activity, motor activity, and quality of thinking displayed at the time of hospital admission. Comparisons were made to determine whether differences in degree of overt symptomatology were associated with rapidity of improvement as measured by length of hospitalization. The results indicate that degree of activity is not associated with rapidity of improvement but that patients with more intact thought processes at the time of admission tend to be discharged more rapidly. The findings shed doubt upon the generalization that more extreme symptomatology responds more rapidly to treatment. Differences in viewing improvement in temporal and qualitative terms were discussed in reference to suggestions for further research."—Author summary.

3484. Goldberg, L. R., & Smith, P. A. (U. Michigan) The clinical usefulness of the Archimedes spiral in the diagnosis of organic brain damage. *J. consult. Psychol.*, 1958, 22, 153-157.—"This study is an evaluation of the Archimedes spiral as a clinical technique for the diagnosis of organic brain damage. . . . [normal] Ss report perceiving the after-

effect of both expanding and contracting spirals without a single instance of failure. Psychiatric, post-EST, and organic patients—in respective order—performed with decreasing efficiency on the same task. When the scores for the groups were adjusted for age, however, the differences between the latter three groups became statistically indistinguishable. The correlation between age and spiral score was .39."—C. T. Morgan.

3485. Hovey, H. Birnet. (VA Hosp., Salt Lake City, Utah) The questionable validity of some assumed antecedents of mental illness. *J. clin. Psychol.*, 1959, 15, 270-272.—"A small group of psychiatrists and clinical psychologists judged a list of personal history items as probably being related or unrelated to neuropsychiatric illnesses. When these judgments were compared with the ways patients versus emotionally 'healthy' veterans had responded to the items, the judges correctly predicted for most of the items."—F. N. Arnhoff.

3486. Jacobson, Jacob G., & Whittington, Horace G. A study of process in the evaluation interview. *Psychiatry*, 1960, 23, 23-44.—The apparent influence of the psychiatrist's personality on the evaluation process was studied by having 4 newly admitted patients interviewed, each by 4 2nd-year psychiatric residents. The similarity in quality if not intensity between the doctor's and patient's interpersonal patterns seem to bring out the most striking difference in effect on the patient.—C. T. Bever.

3487. Johnson, L. C. (Washington U. School of Medicine) Rorschach Concept Evaluation Test as a diagnostic tool. *J. consult. Psychol.*, 1958, 22, 129-133.—"The effectiveness of the CET as a diagnostic tool independent of the Rorschach was evaluated by comparing the clinical scores J, V, E, and R received by [63] schizophrenics, [34] neurotics, and [27] sociopathic personality disorders. No difference between the neurotics and the sociopathic group was found. Only the V score significantly differentiated between the schizophrenic and non-schizophrenic groups. . . . Acute schizophrenics had lower V scores than chronic schizophrenics and the V scores of paranoid schizophrenics were not as low as other schizophrenics. The V score is felt to be useful in diagnosis, but its use as an indicator of the patient's control at the time of testing regardless of diagnosis may be more important. The E score added little information beyond that given by the J and V scores."—C. T. Morgan.

3488. Lichtenberg, Philip; Cassetta, Rhondra K., & Scanlon, John C. (Syracuse, N.Y.) One description of mental health and disorder. *Arch. gen. Psychiat.*, 1960, 3, 575-582.—164 patients were rated on 7 domains of functional disability on a 4-point-scale. The domains were self-other, self-thing, self-body, self-psyche relationships with 3 subdivisions. The ratings correlated highly with diagnostic categories, severity of illness, prognosis and type of treatment prescribed and permitted a clear distinction between neurotics and psychotics.—L. W. Brandt.

3489. Maher, Brendan A., Watt, Norman, & Campbell, Donald T. (Northwestern U.) Comparative validity of two projective and two structured attitude tests in a prison population. *J.*

*appl. Psychol.*, 1960, 44, 284-288.—Which is better for assessing personality—structured or projective devices? "Attitude toward Home & Parents and Attitude toward Law & Justice of 79 prison inmates were each measured by a sentence completion test and a structured attitude test. As examined through a multitrait-multimethod matrix, these tests were found to validate each other quite satisfactorily. Insofar as the two measurement approaches differed at all in the efficacy with which they differentiated crime groups among the prisoners, the structured tests were slightly the better."—J. W. Russell.

3490. Mayman, Martin, & Faris, Mildred. Early memories as expressions of relationship paradigms. *Amer. J. Orthopsychiat.*, 1960, 30, 507-520.—One case is presented to illustrate the use of early memories to study an individual's relationships as experienced when his personal identity was most open to the formative influence of others. 3 sets of early memories of the patient were gathered, his own and his parents'. Blind diagnostic inferences were made concerning character structure of patient and parents, intra- and interpersonal forces. Clinical data from the case summary is included.—R. E. Perl.

3491. Pophal, Rudolf. Psychopathie und Handschrift. [Psychopathic personality and handwriting.] *Psychol. Rdsch.*, 1960, 11, 254-272.—Detection of psychopathic personalities is the most successful area in graphology though no statistics are available. Generally a triad of symptoms appears in the handwritings of psychopaths: lack of vitality, infantilism, and high sensitivity. According to different constellations of the 3 symptoms different types of psychopaths can be distinguished which closely resemble Schneider's typology of psychopaths. Handwriting samples and analyses of the different types are included.—W. J. Koppitz.

3492. Rey, André. Aplicaciones en psicología experimental y en psicología clínica de una técnica que permite reducir la extensión del campo visual. [Applications in experimental and clinical psychology of a technique reducing length of visual field.] *Rev. Psicol. gen. apl., Madrid*, 1959, 14, 5-20.—A tube 25 cm. long and 15 mm. wide is attached to one eye, and the other eye is covered. A pen attached to the tube end may be manipulated to draw perceptions. The systematic nature of searching behavior and tendency to be influenced by stimuli in the visual field appears at age 5. Normals perceive meaningful forms quickly, and the concept developed influences performance. Children take longer and show more confusion. Eye-hand coordination is also a factor. Cerebral arteriosclerotics have trouble recognizing meaningful forms, which is related to deterioration. No difference is found between reduced visual field and tactual maze learning.—B. S. Aaronson.

3493. Rosenberg, B. G., & Altrocchi, J. (Bowling Green State U.) The Yacorzynski Block Technique: A cross-validation study. *J. consult. Psychol.*, 1958, 22, 122.—"The four-minus cutoff is recommended for clinical situations in that it provides a conservative estimate of impairment, and tends to separate organics from other patients with fewer nonorganics misclassified as organics."—C. T. Morgan.

3494. Wing, J. K. (Maudsley Hosp., U. London, England) The measurement of behaviour in chronic schizophrenia. *Acta psychiat. neurol. Scand., Kbh.*, 1960, 35, 245-254.—"A schedule of items descriptive of behaviour in chronic schizophrenia has been analyzed. It yields two scores representing socially withdrawn, and socially embarrassing, behaviour. The scores are reasonably consistent, reliable and valid for . . . [assessing] changes in behaviour in male chronic schizophrenic patients. . . . The two scores show significant relationships to [interview] ratings of mental state."—R. Kaelbling.

(See also Abstracts 3395, 3416, 3419, 3739)

#### PERSONALITY (STRUCTURE & DYNAMICS)

3495. Akeret, Robert U. (City Coll., N. Y.) Interrelationships among various dimensions of the self concept. *J. counsel. Psychol.*, 1959, 6, 199-201.—The Q technique was used to study self-acceptance "totally and in various dimensions of the self concept" in a group of college freshmen. "All self-concept dimensions correlated positively and significantly with total self acceptance."—M. M. Reece.

3496. Bruner, J. S. (Harvard U.) The art of ambiguity: A conversation with Zen Master Hisamatsu. *Psychologia*, 1959, 2, 101-106.—A dialog about the self, with comments by Hisamatsu.—C. T. Morgan.

3497. Colley, Thomas. The nature and origins of psychological sexual identity. *Psychol. Rev.*, 1959, 66, 165-177.—Sexual biotype, sexual sociotype, and sexual psychotype are the components of this new theory of sexual identity. The importance of both parents in the early stages of the learning process is emphasized. The child sees himself as he is perceived by the significant figures in his early life. (16 ref.)—W. J. Koppitz.

3498. Davitz, Joel R. (Columbia U.) Fear, anxiety, and the perception of others. *J. gen. Psychol.*, 1959, 61, 169-173.—96 graduate students checked words describing themselves and acquaintances. Those who characterized themselves as highly fearful and anxious described others as significantly more threatening and punishing than did those who characterized themselves as having little fear and anxiety.—H. Ruja.

3499. Eysenck, H. J. Reminiscence, extraversion and neuroticism. *Percept. mot. Skills*, 1960, 11, 21-22.—"Scores on extraversion and neuroticism (Maudsley Personality Inventory) of 45 adolescents were correlated with pursuit rotor reminiscence scores obtained when 11 1-min. trials were separated by 10 5-min. rest periods. Reminiscence scores correlated positively with extraversion and negatively with neuroticism. Correlations were low throughout and only occasionally significant. A factor analysis of reminiscence and personality scores weakly confirmed this general picture."—C. H. Ammons.

3500. Fisher, S. Hostility and perception of the horizontal. *Percept. mot. Skills*, 1960, 11, 28.—"Chi-square analysis [of average number of degrees by which rod adjustments were above or below true horizontal for 96 Ss] indicated that the greater an individual's pre-occupation with hostile themes the

greater the likelihood that his perception of the horizontal would be pulled down below the true horizontal."—C. H. Ammons.

3501. Grigg, A. E. (U. Texas) **A validity test of self-ideal discrepancy.** *J. clin. Psychol.*, 1959, 15, 311-313.—"Three hypotheses suggested by 'self theory' were tested by means of the semantic differential technique and an adjective check list employed with a sample of normal college students. None of the hypotheses was verified, and trends in the data were not in the predicted direction in two of the three instances."—F. N. Arnhoff.

3502. Häberlin, Annemarie. (Schosshaldenstr. 23, Bern, Switzerland.) **Minderwertigkeitsgefühle.** [Feelings of inferiority.] *Heilpädagog. Werkbl.*, 1960, 29, 206-214.—The origin of inferiority feelings lies not so much in unfavorable comparison with others as in such comparison of the self with the self-ideal. The imperfect realization of our self-ideals tends to create guilt feelings which, if they become chronic, turn into feelings of inferiority. The author sees the major danger of inferiority feelings in resulting resignation, reduced effort, and possible moral bankruptcy. A variety of experiences which may favor the development of inferiority feelings are discussed and illustrated, as well as psychological manifestations or defenses against such feelings. The person who suffers from severe feelings of inferiority can be cured with professional help.—D. F. Mindlin.

3503. Ingram, G. I. C. (St. Thomas Hosp. Medical School, London, England) **Displacement activity in human behavior.** *Amer. Anthropologist*, 1960, 62, 994-1003.—Our species is compared with others in a brief account of displacement activity. Behavior normally expressing man's drives to work and to understand may be recognized in displacement in certain hobbies and artistic creation.—R. L. Sulzer.

3504. Lienert, G. A. (U. Marburg, Germany) **Ueber Schwankungen im Arbeitsversuch und ihre Beziehung zum Poisson-Gesetz.** [Variations in a computing experiment and their relationship to the Poisson distribution.] *Psychol. Beil.*, 1960, 4, 76-90.—Quantitative and qualitative variations of achievement are reported in an experiment in which the Ss were to do sums. It turned out that the quantitative achievement and the errors per section correspond to the Poisson distribution. Further experiments lead to the hypothesis that the Poisson distribution is an expression of the stability of the necessary psychic tension. This hypothesis was corroborated by theoretical findings concerning the conditions that make a Poisson distribution possible. Another conclusion drawn is the finding that achievement motivation and "quality control" are not necessarily aspects of psychic achievement ability. (16 ref., English & French summaries)—H. J. Priester.

3505. Lubetsky, J. (Northwestern U.) **Assimilative projection as measured by trait attribution.** *Dissertation Abstr.*, 1960, 21, 1625.—Abstract.

3506. Mogar, R. E. (State U. Iowa) **Personality correlates of differential performance in a competitive situation.** *Dissertation Abstr.*, 1960, 21, 1631.—Abstract.

3507. Niel, Henri. **L'analyse du destin: Le moi pontifex.** [An analysis of the destiny of man: The cardinal self.] Brussels, Belgium: Desclée de Brouwer, 1960. 185 p. Fr. 120.—The author claims that L. Szondi's contribution to psychology and psychiatry is the most original since that of Freud and Jung. The basic design and elaboration of his work is described particularly as it relates to anthropology, motivation, pathology, religious faith, fantasy, and therapy. The concept of the "cardinal self" is central to this volume. It has its origin in the super-ego and in some respects is like the Freudian ego-ideal. However, it contains a more explicit reference to the transcendent nature of religion and ethics.—N. De Palma.

3508. Pepinsky, Harold B. (Ohio State U.) **Conformity and deviation.** *J. counsel. Psychol.*, 1960, 7, 144-146.—A general description is presented of a symposium on conformity and deviation held at Louisiana State University.—M. M. Reece.

3509. Perloe, S. I. **Inhibition as a determinant of perceptual defense.** *Percept. mot. Skills*, 1960, 11, 59-66.—"Recognition of Blacky pictures presented tachistoscopically was consistent with an inhibition explanation of perceptual defense. Ss who had previously been assessed as showing a tendency to repress an anxiety-arousing picture had significantly poorer recognition of that stimulus than a group of control Ss. Data were presented which ruled out expectancy and overt response suppression as determinants of the results."—C. H. Ammons.

3510. Rogers, A. H., & Walsh, T. M. (Jacksonville State Hosp.) **Defensiveness and unwitting self-evaluation.** *J. clin. Psychol.*, 1959, 15, 302-304.—"55 female Ss were asked to judge five subliminal photographs as to attractiveness. Four of the five photographs were of intermediate attractiveness. The fifth photograph to be judged was the S herself. The photographs had been obtained without the knowledge of the Ss. A defensive group, composed of Ss who obtained high scores on the K scale of the MMPI, unwittingly rated themselves significantly lower in attractiveness than a control group of moderate defensiveness."—F. N. Arnhoff.

3511. Saxton, G. H. (Temple U.) **A study of spontaneous fantasy, as a resource for coping with a failure-stress frustration.** *Dissertation Abstr.*, 1960, 21, 1632.—Abstract.

3512. Thorne, F. C. (Brandon, Vt.) **An operational approach to the diagnosis of levels of personality integration or psychopathology.** *J. clin. Psychol.*, 1959, 15, 255-259.—"Personality integration may be defined and diagnosed in strictly operational terms, using an outline of the laws and conditions under which the hierarchy of factors organizing personality integration may be identified. The level at which personality integration is organized is regarded as continuously fluctuating, both longitudinally in the growth process of a person, and momentarily as a changing mental status reflects organismic efforts to cope with its needs in relation to the environmental milieu."—F. N. Arnhoff.

3513. Trapp, E. P. (U. Arkansas) **Threat and direction of aggression.** *J. clin. Psychol.*, 1959, 15, 308-310.—45 members of a college sorority rated each other on a threat measure and gave responses

to 10 selected test situations from Rosenzweig's Picture Frustration Study. High threat group had significantly more extrapunitive Ss than the low threat group.—F. N. Arnhoff.

3514. Walsh, Richard P. (VA Hosp., Perry Point, Md.) **The effect of needs on responses to job duties.** *J. counsel. Psychol.*, 1959, 6, 194-198.—Duties, as described on a Job Description Questionnaire, were related to needs, as determined by the Edwards Personal Preference Schedule. The hypothesis that "Individuals will select as liked or disliked the specific duties of any given job which are consistent or inconsistent, respectively, with their psychological needs" was considered to be confirmed.—M. M. Reece.

3515. Wechsler, H., & Funkenstein, D. H. **The family as a determinant of conflict in self-perceptions.** *Psychol. Rep.*, 1960, 7, 143-149.—In a questionnaire study "109 male college freshman and 77 seniors related conflict in self-perception as measured by Best-Worst and Actual-Social Discrepancy scores to perception of the family. (a) High discrepancy scores in self-perceptions were associated with perception of large differences between father and mother, in terms of the types of roles they fulfill, and the attitudes they hold. (b) High discrepancy scores in self-perceptions were associated with perception of large differences between the self and the parents, in terms of the attitudes they are perceived to hold; and (c) in the sample of seniors only, high discrepancy scores in self-perceptions were associated with perception of the mother as the leading source of authority and affection, and as the leading parental figure."—C. H. Ammons.

3516. Winthrop, Henry. (U. Wichita) **Self-images of personal adjustment vs. the estimates of friends.** *J. soc. Psychol.*, 1959, 50, 87-99.—"Scores given female college Ss by themselves and by their Fs were in line with the published adult norms of the Bell Adjustment Inventory" but S and F estimates of individual adjustment were "strikingly dissimilar," while "no significant difference between mean adjustment scores" was obtained. "In addition, it was found that Fs exhibit greater uncertainty concerning the total adjustment status of . . . Ss than these latter do of themselves" and "Fs regard . . . Ss as better adjusted than . . . Ss regarded themselves."—J. C. Franklin.

3517. Zavalloni, R., & Mercatali, A. **Indagine sul senso morale e l'aggressività.** [Research on moral sense and aggressiveness.] *Orient. pedagog.*, 1958, 5, 593-610.—"The aim of the present investigation is to study some aspects of personality and of human conduct, and precisely the relation between these two factors, moral sense and aggressiveness, and a third factor, the adjustment of the individuals concerned. . . . A consideration of the coefficients of correlation, as appears from the respective tables, shows that between morality and unsociableness there is a fairly high negative correlation. Higher yet and still of a negative character is the correlation between adjustment and unsociableness. Instead a rather high positive correlation is noted between the humaneness and the index of morality and between morality and adjustment." (English summary)—C. T. Morgan.

3518. Zoberi, H. (U. Southern California) **The relation of evaluative attitudes to traits of introversion and extraversion.** *Dissertation Abstr.*, 1960, 21, 1655.—Abstract.

(See also Abstracts 2993, 3119, 3160, 3236, 3256, 3266, 3269, 3340, 3368, 3369, 3453, 3471, 3507, 3799, 3909, 3935, 3945)

#### PSYCHOANALYTIC THEORY

3519. Ansell, C. **Ideas and ideologies in psychotherapy.** *Psychoanal. psychoanal. Rev.*, 1960, 47(3), 3-12.—" . . . understanding the meaning of the human condition is hardly to be met by recourse to a psychology concerned with fragments of human behavior, or its opposite, a sociological psychology which perceives man first and foremost as but a part of a social whole." For the psychoanalyst conflict is between conscious and unconscious demands within the individual.—D. Prager.

3520. Askew, M. W. **Classical tragedy and psychotherapeutic catharsis.** *Psychoanal. psychoanal. Rev.*, 1960, 47(3), 116-123.—The correlation between the form of psychotherapeutic processes and the form of tragic drama furnishes the figure in which psychotherapeutic catharsis may be seen and conceptualized. "By seeing his analogy with the tragic poet, the analyst may understand more clearly his creative role in the recreation and reorganization of the given, the data, the dynamic but eccentric organism which the client presents." The analyst's function is not simply that of catalyst but also, thru the nature of his own soul and vision, that of significant determiner of the shape of things to come.—D. Prager.

3521. Bash, K. W. (Abassia Mental Hosp., Cairo, Egypt) **Mental health problems of aging and the aged from the viewpoint of analytical psychology.** *Bull. WHO*, 1959, 21, 563-568.—"According to Jung's analytical psychology man is either predominantly extravert or predominantly introvert. Whichever he is, he must in most cases, in order to satisfy the biological drives of the earlier part of his life, adapt himself to an extraverted culture and thus become largely extravert. In the later part of life, as biological involution sets in, this attitude and the values attached thereto no longer suffice. The strains set up by the resulting need for a reorientation in life are a fruitful source of mental disorder."—J. C. Franklin.

3522. Bellak, Leopold. (Elmhurst General Hosp., N. Y.) **The treatment of schizophrenia and psychoanalytic theory.** *J. nerv. ment. Dis.*, 1960, 131, 39-46.—A short historical sketch of the relationship between theoretical and therapeutic advances of schizophrenia, an appraisal of the current status of the problem, and a discussion of the psychoanalytic concept of ego psychology in relation to treatment of schizophrenia.—N. H. Pronko.

3523. Devereux, George. (Temple U. School Medicine) **The female castration complex and its repercussions in modesty, appearance and courtship etiquette.** *Amer. Imago*, 1960, 17, 3-19.—As a result of the female castration complex, women view their genitalia as repulsive. The need for exaggerated praise represents a need for the denial of a keenly felt defect. Data are presented from



both analytical and extra-analytical sources.—*W. A. Varvel.*

3524. Eckhardt, M. H. The detached person: A discussion with a phenomenological bias. *Amer. J. Psychoanal.*, 1960, 20, 139-163.—"People are never just neurotic mechanisms. Neurotic behavior invariably tells a human story of suffering and of protest or resignation." Many detached people live with a surprising degree of equanimity considering the paucity of their lives. Detached people are often best understood if one conceives of their experiencing life as a stage where their life drama is acted out. The detached person is defined imprecisely or vaguely as one who seems to stand aside, look on, and observe, but with the basic attitude of an outsider. Changes in life and analysis may often release a vital individual with a surprising degree of self-expression.—*D. Prager.*

3525. Feldman, Bronson. (4600 York Rd., Philadelphia, Pa.) Sidelights on Freud's "Psychotherapy of Everyday Life." *Amer. Imago*, 1960, 17, 47-60.—Errors investigated by Freud in his "Psychotherapy of Everyday Life" are analyzed in more detail.—*W. A. Varvel.*

3526. Feldman, H. The id: Present, past—and future? *Psychoanal. psychoanal. Rev.*, 1960, 47(2), 3-15.—Contrast between id psychology and ego psychology is obscured with phrases trying to preserve classical Freudian theory. One view is that the id is identical with the instincts and is outside psychology, while the other is that the id is the fundamental region of the mind full of wishes and ideas pressing forward to overwhelm consciousness and find action. One view is that the superego is on the sidelines while the truly active part of the mind is the ego. Another view is that the superego is the major force in repression and the molding of character. Either the id is recognized as the prime mover of mental processes or it has no direct place in a theory of the mind. Lack of interest in the id is a rejection of Freudian concepts.—*D. Prager.*

3527. Fromm, Erich. (Michigan State U.) Psychoanalysis and Zen Buddhism. *Psychologia*, 1959, 2, 79-99.—The study of Zen Buddhism is significant for all students of psychoanalysis.—*C. T. Morgan.*

3528. Goldfried, Marvin R. (U. Buffalo) A psychoanalytic interpretation of sensory deprivation. *Psychol. Rec.*, 1960, 10, 211-214.—The findings of hallucinations, emotional lability and other personality breakdowns are interpreted as compatible with this theory. When external stimulation is lacking, internal tension builds up, and it should be noted "that increased stimulation requiring elimination can come from two sources: external stimulation and internal tension." The result in this type of experiment is simulation of primary narcissism and depersonalization. Possibilities for further research are suggested.—*R. J. Seidel.*

3529. Halpern, H. M., & Lesser, L. N. Empathy in infants, adults, and psychotherapists. *Psychoanal. psychoanal. Rev.*, 1960, 47(3), 32-42.—Post-infantile empathy is the imaginative transposing of oneself into the psychological frame of reference of another so that the other person's think-

ing, feeling, and acting are predictable. Infantile empathy as conceived of by H. S. Sullivan is the basis of later empathy. The therapist's ability to use intuitive emotionalized receptivity accurately is a direct outgrowth of his experiences with infantile empathy. A person who is at home with most of his own behavior is likely to be a good empathizer. Empathy is a tool for the therapist and a goal for the patient.—*D. Prager.*

3530. Hilgard, Josephine R., & Fisk, Fern. (Stanford U.) Disruption of adult ego identity as related to childhood loss of a mother through hospitalization for psychosis. *J. nerv. ment. Dis.*, 1960, 131, 47-57.—The contribution of a child's position in the family, "a special symbiotic relationship with a sick mother or a disturbed substitute mother, a traumatic separation, a subsequent saga, and guilt can exert an inexorable effect on the course of individual development." This thesis is developed in connection with a discussion of a series of 14 patients.—*N. H. Pronko.*

3531. Horney, Karen. Der Kampf in der Kultur: Einige Gedanken und Bedenken zu Freud's Todestrieb und Destruktionstrieb. [Culture and aggression: Some considerations and objections to Freud's theory of instinctual drives toward death and destruction.] (Trans. by B. S. Van Bark) *Amer. J. Psychoanal.*, 1960, 20, 130-138.—Struggle, in the sense of aggression, will always exist. Aggression, in the sense of mild to extreme destructiveness in mankind, also exists as Freud states. At times destructiveness may be inhibited by civilization. If we adopt the view that destructiveness drives in man are not innate but are acquired under specific conditions, then we can reduce the intensity and extensiveness of destructiveness. Such modification of destructiveness would be very valuable for the future of civilization.—*D. Prager.*

3532. Hullbeck, C. R. Psychoanalytical notes on modern art. *Amer. J. Psychoanal.*, 1960, 20, 164-173.—Psychoanalysis and modern art are often rejected because both tell the dark truth about people in the chaotic 20th century. "Modern art is a psychic state of special awareness of man's situation as a human being." All art is a self-realizing activity. Modern art is an expression of existential feeling and thinking in that it is a search for reality outside the rational ego.—*D. Prager.*

3533. Jacobi, Jolande. Freud y Jung: Encuentro y separación. [Freud and Jung: Meeting and separation.] *Rev. Psicol. gen. apl., Madrid*, 1958, 13, 723-738.—A comparison of the contributions of Freud and Jung. Freudian doctrines were created by and directed against 19th-century Victorianism but bear the mark of the materialism and rationalism of this century. Jung's theories are based on an analysis of the irrational forces prevalent from the beginning of this century which have resulted in 2 world wars and great cruelty. He has viewed them in mythological terms as demons of the collective unconscious. Personal predilection determines which theory one prefers. Both have defects and strengths, and both need further development.—*B. S. Aaronson.*

3534. Kelman, Harold. (American Inst. Psychoanalysis, NYC) Eastern influences on psycho-

analytic thinking. *Psychologia*, 1959, 2, 71-78.—The emphasis of psychoanalysis on the unconscious, family relations, the master-disciple relation, and "living in the depths of being" have brought the West closer to the East.—C. T. Morgan.

3535. Kenney, William. (Massachusetts State Teachers Coll., Boston) **Dr. Johnson and the psychiatrists.** *Amer. Imago*, 1960, 17, 75-82.—Psychiatric studies of Samuel Johnson which ignore his works and concentrate solely upon his life are based on questionable assumptions. "A more rewarding series of studies is that by scholars whose literary emphasis takes into consideration psychological implications." Johnson was a very complex personality whose life should not be divorced from the context of his own period.—W. A. Varvel.

3536. Klaf, F. S. **Napoleon and the grand army of 1812: A study of group psychology.** *Psychoanal. psychoanal. Rev.*, 1960, 47(3), 69-76.—By his intuitive understanding of group dynamics, Napoleon was able to bind together the armies of many nations and drive them toward the conquest of the Russian Empire. "Verification of Freud's discovery that the cohesiveness of the group depends upon the ties to its leader was found in analyzing the disintegration of the Grand Army after Napoleon's departure." In exercising a type of paternalism, the group leader revives the early ego identifications of childhood where the child conceives of the father as omnipotent. The group members, unfettered by reality testing, influence the developed reality sense of the leader and may impel him to actions that sweep him along to his destruction.—D. Prager.

3537. Malmquist, Carl P. (U. Minnesota Hosp., Minneapolis) **A comparison of orthodox and existential psychoanalytic concepts of anxiety.** *J. nerv. ment. Dis.*, 1960, 131, 371-382.—The concept of anxiety is explicated from the conventional psychoanalytic viewpoint and from some deviant positions of psychoanalysis by way of a sketch of "the main philosophical background of current existential psychoanalysis."—N. H. Pronko.

3538. Mazer, Milton. **The therapeutic function of the belief in will.** *Psychiatry*, 1960, 23, 45-52.—The conflict between the doctrine of determinism and belief in the possibility of free will is investigated as to its nature and consequences for psychoanalytic therapy. Total commitment to the doctrine of psychic determinism is considered antitherapeutic. "It is desirable that the therapist act as though the possibility of exercising free will exists."—C. T. Bever.

3539. Meerloo, J. A. M. **Who are these: I, me, my ego, and myself? A survey of ego aspects.** *Psychoanal. psychoanal. Rev.*, 1960, 47(2), 83-96.—The 2 keynotes of the Freudian concept are cathexis and demarcation. "Ego development in man may be seen in itself as a demarcation and defense against the biologically necessary symbiotic dependency of man, the foetalized animal, on his parents. . . . Looked at from a structural standpoint, there are many egos living in man, many substructures, many internalized images waging an ecological battle between instinctual invasions on the one hand and coercive persuasions on the other. This is illustrated by examples of so-called multiple personalities, de-

personalization, depersonification, and mystic and psychotic selflessness."—D. Prager.

3540. Nelson, M. C., & Schendler, D. **Changing patterns of transference and fetishism: A cultural inquiry.** *Psychoanal. psychoanal. Rev.*, 1960, 47(3), 13-31.—The transference object may be animate or inanimate, natural or supernatural as long as it serves as the recipient of attitudes and affects originally directed toward the primary objects. The individual's transference pattern is his basic mode of relating to the social setting. Transference may be studied to determine whether behavior patterns that enjoy group sanction are chiefly conditioned by similarities in the primary object relationships and habit training of each individual. Modern man finds that his replaceable and expendable fetish objects fail to mobilize a sense of personal power. This limitation plus the loss of the capacity for religious transference confines the discharge of transference feelings to within the human peer group. Existential philosophy is seen as an emergent mystique seeking to rationalize and render more palatable Western man's current dilemma.—D. Prager.

3541. Pederson, Stefi. (Värlavägen 33, Stockholm, Sweden) **Phallic fantasies, fear of death, and ecstasy.** *Amer. Imago*, 1960, 17, 21-46.—"The phallic narcissistic character is especially liable to experience states of ecstasy, negative as well as positive. But the libidinous and reparative impulses seem to dominate. . . . we often find this type of personality among creative artists." One may conquer the fear of death through identification with the resurrected dead man or through identification with the living child who is forever united with his mother.—W. A. Varvel.

3542. Rinder, I. D. **Degradation, abnegation, debasement of self: A dynamic in role change.** *Psychoanal. psychoanal. Rev.*, 1960, 47(3), 106-115.—Degradation often creates a sense of isolation and confusion. Group experience of degradation may routinize role change and cause growth of esprit de corps among segments of society. Degradation aids in suppressing pre-existing statuses. It exalts the self at the expense of the antecedent selves.—D. Prager.

3543. Schneck, J. M. **Psychoanalytic concepts and the psychophysiology of Jean Fernel.** *Psychoanal. psychoanal. Rev.*, 1960, 47(2), 97-102.—The psychological attributes of physiological functioning as described by Fernel in 1542 evoke present day conceptions of organ language as noted in contemporary psychosomatics. Fernel also implied that emotions may influence organic function without the physiological changes having a specific psychic meaning. Such appreciation of the history of concepts enriches the developmental approach to psychosomatic medicine, psychiatry, and psychoanalysis.—D. Prager.

3544. Schnier, Jacques. (U. California, Berkeley) **Free association and ego function in creativity: A study of content and form in art.** *Amer. Imago*, 1960, 17, 61-74.—Artistic creativeness has a 2-fold nature: content and form. Content is related to the id; form is related to the synthesizing processes of the ego. Form quality differentiates the creative work from mere catharsis

of emotions. It is the secondary process that enables the artist to find the content element of his art expression in a form.—*W. A. Varvel.*

3545. **Trillat, E.** (Hôpital Psychiatrique de Clermont d'Oise) **Oralité et langage.** [Orality and language.] *Evolut. psychiat.*, 1960, 25, 383-409.—According to the author, objective examination of prelanguage sounds cast doubt upon the value of 2 aspects of psychoanalytic theory. One is that psychoanalysis treats language in relation to the theory of the transition period—from the principle of pleasure to the principle of reality. This is criticized as only partially appropriate, since it is made on the basis of considering either the oral or the laryngeal parts of speech. The second criticism concerns the assumption of an orderly progression from one phase to the next. This is considered unwarranted, since it is based upon unsatisfactory evidence.—*L. A. Ostlund.*

3546. **Wenkart, A.** **Modern art and human development.** *Amer. J. Psychoanal.*, 1960, 20, 174-179.—The relationship of modern art and human development hinges on creativity. "Human development is itself a creative process or can be in a second-chance analysis if the prohibiting forces are overcome and the struggle is creative. The drama and excitement of the mysterious creative process are more evident in the active artist than in other persons because his art yields visible proof of the struggle. In a wider sense, however, the artist is a paradigm for the legions who suffer both in their need to bring forth from within them that which cries out for life and also in their all-too-frequent failure to achieve its birth."—*D. Prager.*

(See also Abstracts 2869, 3135, 3751(a))

#### PHYSIOLOGICAL CORRELATES

3547. **Bartenwerfer, H.** (U. Marburg, Germany) **Herzrhythmus-Merkmale als Indikatoren psychischer Anspannung.** [Pulse rhythm criteria as indicators of psychic tension.] *Psychol. Beitr.*, 1960, 4, 1-25.—Description of a method for the diagnosis of tension based on a discriminating-analytic study of pulse rhythm and the mean time between heartbeats (proportional to the pulse frequency). Experiments have provided evidence that there are definite relations between psychic tensions and pulse rhythm. Apparatuses for the registration of pulse rhythm and various possibilities for their application are described. (28 ref., English & French summaries)—*H. J. Priester.*

3548. **Chambers, D. A., Pasternak, R., & Mueller, H. F.** **A clamp for finger-sweat prints.** *Percept. mot. Skills*, 1960, 11, 35-38.—"A simple finger clamp for recording finger-sweat prints is described. Records for 40 Ss were compared with those obtained using Mowrer's postal scale device. Inter-judge reliabilities for a 6-mo. period were above .86; intra-judge reliability was above .93."—*C. H. Ammons.*

3549. **Dykman, Roscoe A., Reese, William G., Galbrecht, Charles R., & Thomasson, Peggy A.** (U. Arkansas) **Psychophysiological reactions to novel stimuli: Measurement, adaptation, and relationship of psychological and physiological variables in the normal human.** *Ann. NY Acad. Sci.*, 1959, 79, 43-107.—40 males underwent 15 minutes

of rest, then 18 minutes of tone, and then thought about answers to a series of questions with concurrent skin resistance, heart rate, and respiration recording. Findings were most marked with skin resistance. Results are considered in terms of inter-correlation, change in time, and initial level. Personality variables of anxiety, defensiveness, apprehension, intelligence, and achievement motive are also related to these data.—*B. S. Aaronson.*

3550. **Sanders, Ella M., Mefferd, Roy B., Jr., & Bown, Oliver H.** (U. Texas) **Verbal-quantitative ability and certain personality and metabolic characteristics of male college students.** *Educ. psychol. Measmt.*, 1960, 20, 491-503.—". . . certain personality, physiological, biochemical attributes, and scholastic performance were compared in University of Texas male freshmen who had different verbal and quantitative ability patterns." 3 groups were used: high verbal-low quantitative, low verbal-high quantitative, and high verbal with high quantitative. The Edwards Personal Preference Schedule, McGuire Q-check, and Holtzman's Ink Blot Test were used to assess personality. 4 overnight urine samples were collected. All of the measures seemed to correlate fairly well.—*W. Coleman.*

3551. **Weybrew, B. B., & Alves, D.** (USN Medical Research Lab.) **An exploratory study of the relationship of autonomic resiliency to manifest anxiety and selected personality traits.** *USN Med. Res. Lab. Rep.*, 1959 8(2, Whole No. 307). 26 p.—Skin conductance measurements were made on 23 male Ss ranging in age from 17 to 34 years during a control interval, during hyperventilation, during breath holding, and during a recovery interval. Conductance levels during the control interval were significantly correlated with conductance levels during the recovery interval. Hyperventilation was accompanied by a significant increase in skin conductance. Subjective ratings of a variety of traits were made on 20 of the Ss by instructors who had been associated with them for 4 mon. Various indices based on skin conductance were correlated with the ratings. Significant correlations were found for traits related to emotional stability and adaptability, motivation, likeability, self-confidence, and excitability.—*J. L. Brown.*

(See also Abstract 3273)

#### THERAPY, GUIDANCE, & MENTAL HEALTH

3552. **Alhadeff, B. W.** **L'investigation psychologique en psychiatrie: Recherches théoriques et expérimentales dans le domaine de la pensée conceptuelle.** [Psychological inquiry in psychiatry: Theoretical and experimental studies in the sphere of conceptual thought.] *Rev. Psychol. appl.*, 1959, 9, 125-169.—The 1st part of this paper is a critique of the work of Goldstein, Vigotski, and Piaget. The 2nd deals with the application to clinical psychiatry of a test conceived by Morel. Its analysis led to the concept that conceptual thinking involves 4 specific processes: identification, comparison, orientation, and structuralization, each of which can be manifested in 3 degrees—vague, more precise, specific. When the test was applied to several groups of schizophrenic and mental patients, it led to the conclusion

that schizophrenics lose the possibility of abstract thinking and that demented patients manifest the same regression to an even more remarkable degree. (45-item bibliogr.; English, German, & Spanish summaries)—*W. W. Wattenberg*.

3553. **Cerda, E.** *Psychologie clinique*. [Clinical psychology.] *Rev. Psychol. appl.*, 1959, 9, 197-215.—This translation of a chapter from the author's book, *Psicologia Aplicada*, sketches the history, procedures, and problems of clinical psychology. (64-item bibliogr.)—*W. W. Wattenberg*.

3554. **Marmor, Judd.** (U. California, Los Angeles) **The reintegration of psychoanalysis into psychiatric practice.** *Arch. gen. Psychiat.*, 1960, 3, 569-574.—Psychoanalysis which first met with great opposition from psychiatry is entering the thought and practice of the latter more and more. In this process, psychoanalysis itself has developed and broadened its field of application.—*L. W. Brandt*.

3555. **Mowrer, O. Hobart.** (U. Illinois) **"Sin": The lesser of two evils.** *Amer. Psychologist*, 1960, 15, 301-304.—In recent years it has been taught that the neurotic or the psychotic is "not sinful but sick, the helpless, innocent victim of the sins of the fathers," and could be rescued only by a specialized, esoteric form of treatment. . . . I suggest that, as between the concept of sin (however unsatisfactory it may in some ways be) and that of sickness, sin is indeed the lesser of two evils.—*S. J. Lachman*.

(See also Abstract 2949)

#### MEDICAL THERAPY

3556. **Scoville, William Beecher.** (85 Jefferson St., Hartford, Conn.) **Late results of orbital undercutting.** *Amer. J. Psychiat.*, 1960, 117, 525-532.—42 out of 92 private patients were studied in a "late follow-up" series after a postoperative period that averaged 6.2 years. These patients were compared with 34 schizophrenics from a poorer economic and cultural background followed over a 10-year period in 2 state mental institutions. Among the findings, general results showed that patients followed from 4 to 11 years were superior in the categories of schizophrenia, depression, and the "elderly," averaging 100%, 93%, and 86%, respectively. Patients from the lower economic and cultural range, although showing much less overall benefit, showed an equal amount of late over early improvement.—*N. H. Pronko*.

(See also Abstract 3522)

#### Drug Therapy

3557. **Battista, O. A.** **Mental drugs: Chemistry's challenge to psychotherapy.** Philadelphia, Pa.: Chilton, 1960. xx, 155 p. \$3.95.—The purpose of this book, written by a chemist, is "to provide a comprehensive, authoritative (and to the extent that is possible by the facts available, an unbiased) record of the multifaceted role of chemistry in the world-wide battle against mankind's most terrifying scourge—mental illness." The author stresses the importance of endogenous chemical influences upon mental health, including a survey of drugs currently in use. "The evidence, indeed, is that 'talk therapy' which has held sway for over a half century must

now step down to a stature of less far-reaching value and consequence in deference to mental drugs—chemistry's formidable challenge to psychotherapy and psychoanalysis."—*M. E. Jarvik*.

3558. **Benham, S.** (Bethlem Royal Hosp., London, England) **The specificity of reserpine in the treatment of schizophrenia in identical twins: A controlled experiment.** *J. Neurol. Neurosurg. Psychiat.*, 1960, 23, 170-175.—"Identical twins developed a schizophrenic illness within a few days of each other. One was treated with insulin coma therapy and E.C.T. and the other in a different hospital with psychotherapy with no resulting improvement. When . . . [later] both were admitted to the same hospital, a controlled drug trial was undertaken. Each twin responded to the same dosage of reserpine and relapsed when chlorpromazine was administered. There was a similar increase in weight while on the latter drug. The similarity of their response is interpreted as further evidence of their identical genetic constitution. Previous comparisons of the actions of chlorpromazine and reserpine are briefly discussed." (1 table, 1 fig.)—*Author summary*.

3559. **Casey, Jesse F., Lasky, Julian J., Klett, C. James, & Hollister, Leo E.** (VA Central Office, Washington, D.C.) **Treatment of schizophrenic reactions with phenothiazine derivatives: A comparative study of chlorpromazine, trifluorpromazine, mepazine, prochlorperazine, perphenazine, and phenobarbital.** *Amer. J. Psychiat.*, 1960, 117, 97-105.—*N. N. Pronko*.

3560. **Crane, G. E.** **Some questions concerning the value of psychotherapy in nonhospitalized patients treated with psychopharmacologic agents.** *Psychiat. Quart.*, 1960, 34, 430-442.—The use of psychotherapy is of questionable value in drug-treated patients. Psychopharmacology alone can be effective in neuroses and some psychoses. Psychotherapy is indicated only for patients with well-defined personality disorders.—*D. Prager*.

3561. **Galibert, Jacques.** (Hôpital Ste. Anne, Paris, France) **Subnarcose amphetamine et psychothérapie des états d'angoisse.** [Amphetamine subnarcosis and the psychotherapy of anxiety states.] *Encephale*, 1960, 49, 332-366.—A form of therapy is described for anxiety states, which consists of the use of a solution of sodium amytal and D-methylamphetamine to effect subnarcosis. This procedure is combined with a modification of analysis, which is described as "deconditioning." Problems in administration of the drugs and in the conducting of psychotherapy are discussed. Out of 74 cases, 40 cures and 22 improvements are reported. 4 case histories are presented and discussed.—*W. W. Meissner*.

3562. **Grunewald, Karl R.** **Die Behandlung psychisch kranker Kinder mit Dauerschlaf.** [The treatment of psychologically ill children with protracted narcosis.] *Acta paedopsychiat.*, 1960, 27, 252-266.—Sleep is induced for 16 of each 24 hours. The staff adopts a passive but ego-supporting role. Psychopathological material is worked through daily. Children under 6, primary personality disorders, and psychotics are excluded from this treatment. Depressions and psychological inhibitions responded



best; particularly striking was the improvement in 5 cases of obsessive-compulsive neuroses. Character and anxiety neuroses responded poorly. The essential psychological reaction during treatment was the alleviation of more recently acquired inhibitions, allowing greater contact.—*G. Rubin-Rabson.*

3563. Hankoff, Leon D., Engelhardt, David M., Freedman, Norbert; Mann, David, & Margolis, Reuben. (State U. New York Downstate Medical Center) Denial of illness in schizophrenic outpatients: Effects of psychopharmacological treatment. *Arch. gen. Psychiat.*, 1960, 3, 657-664.—Of 169 schizophrenic outpatients between the ages of 18 and 44 who were ill at least 1 year prior to clinic acceptance and had a relative ready to supply collateral information, 38 denied mental illness, 31 admitted it only in the past, 50 admitted it when questioned, and 50 admitted it spontaneously. The first 2 groups were called "deniers," and others "accepters." Regular interviews combined evaluation, ataractic drug or placebo administration, and supportive psychotherapy. During a 6-months-period fewer drug than placebo treated Ss were hospitalized. More "deniers" and "accepters" were hospitalized. "Deniers" seemed to benefit more from drug treatment than "accepters."—*L. W. Brandt.*

3564. Kline, Nathan S. (Rockland State Hosp., Orangeburg, N.Y.) Psychopharmaceuticals: Effects and side effects. *Bull. WHO*, 1959, 21, 397-410.—"Drugs which affect psychological behavior are being used in vast amounts nowadays, with, in all too many cases, but scant regard for their exact uses or possible side effects. This article contains a clinical classification of these drugs, followed by an account of their principal side effects and the means of obviating them."—*J. C. Franklin.*

3565. Kline, Nathan S., & Saunders, John C. Drugs for treatment of depression. *Neurology*, 1959, 9, 224-227.—A report on the effects of mersilid, based on 20 months' observation of 450 patients suffering from various types of depressive and withdrawal states. Conclusions: "The use of Mersilid produces remarkable improvement in the depressive syndromes because of the drug's antidepressive and psychic energizing properties. . . . The tranquilizers are still superior in treating overt psychotic behavior; however, in patients on long-term therapy—twelve to twenty months—discontinuance of Mersilid caused a return of delusions and hallucinations. Apparently, some psychopathology may be alleviated by long-term therapy with a psychic energizer."—*R. Gunter.*

3566. Lehman, L. E., & Knight, D. A. Placebo-proneness and placebo-resistance of different psychological functions. *Psychiat. Quart.*, 1960, 34, 505-516.—Ss were 24 healthy females, from 18 to 28 years of age, given 12 tests before and after placebo administration. "It is postulated that placebo-prone functions include reactions of the autonomic nervous system, and psychological functions requiring considerable integration—such as motivational factors, emotional reactions, and the personal aspects of painful experiences. Placebo-resistant functions include psychological processes of a fundamental nature requiring a minimum of integration. Of the more complex functions, the components con-

cerned with accuracy of performance are relatively placebo-resistant while components related to speed of performance tend to be relatively placebo-prone."—*D. Prager.*

3567. Lindemann, Erich. (Harvard Medical School) The relation of drug-induced mental changes to psychoanalytic theory. *Bull. WHO*, 1959, 21, 517-526.—Psychotropic drugs "cannot be said to 'cure' mental disease, but, by their effect on the basic psychological processes, they can modify the personality structure and the perceptive, executive and integrative functions of the ego in such a way as to facilitate more adequate patterns of behavior and strengthen the adaptive resources of the patient's personality." The author "examines the concepts of human personality developed by adopting a psychoanalytic approach and, in the light of these concepts, discusses the effects on behavior observed following the administration of various psychotropic drugs."—*J. C. Franklin.*

3568. Sandison, R. A. (Powick Hosp., Worcester, England) The role of psychotropic drugs in group therapy. *Bull. WHO*, 1959, 21, 505-515.—This paper examines "those aspects of the drug treatment of mental disorder which relate to the human environment or group in which the patient finds himself." The cases of deep insulin treatment and lysergic acid diethylamide serve to illustrate that "the attitude of social groups to psychotropic drugs is determined by the real or apparent effects these drugs have on super-ego function. This appears to have some relationships to the so-called placebo phenomenon. The fact that clinical trials tend to lead to results unduly favorable to the drug tested is noted and some suggestions are made as to how these trials can be improved."—*J. C. Franklin.*

3569. Sandison, R. A. (Powick Hosp., Worcester, England) The role of psychotropic drugs in individual therapy. *Bull. WHO*, 1959, 21, 495-503.—"Certain effects produced by psychotropic drugs in man are examined . . . to illustrate the means by which methods of treatment based on psychotherapy can be modified or improved." It is suggested "that tranquillizing drugs may be used in association with psychotherapy in four ways: for controlling symptoms; for releasing unconscious material; for controlling disturbances associated with such release; and for removing inhibitions." In particular, "the use of lysergic acid diethylamide in psychological medicine is dealt with in some detail."—*J. C. Franklin.*

3570. Sarwer-Foner, G. J. A methodology of testing and clinical applications of the neuroleptic drugs in psychiatry. *Psychiat. Quart.*, 1960, 34, 28-46.—To date the neuroleptic drugs are only of symptomatic interest. The neuroleptics represent a step forward in the development of agents against mental disease, but they have yet to solve the problems of schizophrenia.—*D. Prager.*

3571. Sherman, L. J. Mental patients' attitudes toward tranquilizing drugs: Test development. *Psychol. Rep.*, 1960, 7, 167-170.—"A sentence-completion test has been designed to evaluate the attitudes of mental patients toward medication. The form contains 25 items, is easily administered, requires a minimum of time and supervision, possesses

acceptable test-retest reliability, and is objectively scoreable."—C. H. Ammons.

3572. Wiedorn, W. S., Jr., & Davis, F. H. Effects of the interpersonal field on the emergence and recognition of psychopharmacological changes. *Psychiat. Quart.*, 1960, 34, 488-494.—101 schizophrenic inpatients given mepazine (pacatal) showed varying effects of the drug, depending upon the wishes and needs of the individual staff member to recognize drug effects, in interpersonal areas. More complex and meaningful controls are needed when drugs with interpersonal consequences are studied.—D. Prager.

(See also Abstract 3640(a))

#### Shock Therapy

3573. Golin, Barbara A. K. (State U. Iowa) The effect of shock and shock-threat at various task phases upon block design performance. *Dissertation Abstr.*, 1960, 21, 1631.—Abstract.

3574. Pronko, N. H., Sitterly, Rene, & Berg, K. (U. Wichita) Twenty years of shock therapy in America, 1937-1956: An annotated bibliography. *Genet. psychol. Monogr.*, 1960, 62, 233-329.—A series of 484 references on shock therapy from the medical and psychological literature was read and evaluated. These are briefly annotated in a chronological sequence over the 20-year period from 1937 to 1956 and evaluated in the summary from the standpoint of a general overview, the nature of shock therapy, techniques employed, and results achieved from 2 decades of work in the area.—N. H. Pronko.

#### PSYCHOTHERAPY

3575. Borgatta, E. F. (Russell Sage Found.) The new principle of psychotherapy. *J. clin. Psychol.*, 1959, 15, 330-334.—A humorous article extending the placebo value principle to psychotherapy. The techniques, underlying philosophical considerations, and professional training for placebo psychotherapy are discussed.—E. Y. Beeman.

3576. Brammer, Lawrence M., & Shostrom, Everett L. *Therapeutic psychology: Fundamentals of counseling and psychotherapy*. Englewood Cliffs, N. J.: Prentice-Hall, 1960. xvii, 447 p. \$6.95.—Introduction by Paul E. Meehl. Prepared for upper division and graduate students as an introduction to counseling and psychotherapy as well as for practitioners who need re-examination of fundamental processes of helping humans towards maturity. 16 chapters are grouped into 3 parts: "Foundations," "Techniques," and "Special Areas of Application." Part I covers trends, theoretical aspects, personality development, and counseling processes. Part II covers preparatory procedures, problems of relationship, interpretation techniques, and group dynamics. Part III covers counseling in specific areas. (329 ref.)—S. Kavrukk.

3577. Carlson, Eric T., & Dain, Norman. (Cornell U. Medical Coll.) The psychotherapy that was moral treatment. *Amer. J. Psychiat.*, 1960, 117, 519-524.—The sources of various concepts of the doctor-patient relationship are traced out historically as they evolved between 1750 and 1840 displacing the "moral treatment" of that day to our

contemporary "milieu therapy." The novel aspect of present-day methods involves a trend toward more complex and more explicit psychotherapeutic methods that are practiced today.—N. H. Pronko.

3578. Fairweather, G. W., Simon, R., Gebhard, M. E., Weingarten, E., Holland, J. L., Sanders, R., Stone, G. B., & Reahl, J. E. (VA Hosp., Perry Point, Md.) Relative effectiveness of psychotherapeutic programs: A multicriteria comparison of four programs for three different patient groups. *Psychol. Monogr.*, 1960, 74(5, Whole No. 492). 26 p.—The 4 types of programs studied were: (a) individual work assignment and planning for posthospital adjustment (control group); (b) individual work assignment, individual psychotherapy, and departure planning; (c) individual work assignment, group psychotherapy, and departure planning; and (d) social interaction or group-living therapy. The individual therapy group required the greatest amount of treatment time with group-living next and group therapy and the control group about equal in time consumed. As was anticipated, long-term psychotics were in treatment for the longest time period and short-term psychotics and nonpsychotics required about equal time. In general, it was demonstrated that the short-term psychotics made the most adequate posthospital adjustment, the nonpsychotics next, and the long-term psychotics the poorest adaptation.—M. A. Seidenfeld.

3579. Ford, E. S. C., Robles, Carlos, & Harlow, Robert G. (U. Washington School Medicine) Psychotherapy with child psychotics. *Amer. J. Psychother.*, 1960, 14, 705-718.—The rationale for and the results of psychotherapy with 2 psychotic children are presented. The major principle in treating these children is to assist the ego in acquiring control over the instincts.—L. N. Solomon.

3580. Glad, Donald B. *Operational values in psychotherapy*. New York: Oxford Univer. Press, 1959. xiii, 326 p. \$7.50.—This book attempts to outline an operational conceptualization of psychotherapy with specific respect to psychodynamic theory and the integration of value systems in the therapeutic process. Major schools of thought as expressed in contemporary psychotherapies are subjected to an operational evaluation with strong emphasis upon the phenomenological aspects of the interpersonal process and the dimensions of this patient-doctor encounter in the treatment situation. Illustrative case material is utilized to develop a structure for the operational concepts and, with contrasting approaches, makes for clarity of major points in the author's overall orientation toward the meaning of psychotherapy as a process of what he describes as interpersonality.—M. V. Kline.

3581. Heinicke, Christoph M., & Goldman, Arnold. Research on psychotherapy with children: A review and suggestions for further study. *Amer. J. Orthopsychiat.*, 1960, 30, 483-494.—After reviewing the literature on the effects of therapy on children and noting that from the best studies it can be concluded that children who receive treatment improve more than controls, the authors suggest the need for a research design which poses certain specific questions in relation to therapy framed in the context of a process approach. They have begun a study which, instead of assessing the patients at

closing or follow-up, carefully examines each session of therapy; notes what changes occur in the child; and attempts to relate these to the therapeutic interaction, relations to significant figures, and certain important events in the child's life.—R. E. Perl.

3582. Hiler, E. W. (Agnews State Hosp., Calif.) **Initial complaints as predictors of continuation in psychotherapy.** *J. clin. Psychol.*, 1959, 15, 344-345.—Comparison of 216 patients who either terminated or remained in therapy. Patients who remained in treatment initially complained more often of obsessions, phobias, depression, poor concentration, and anxiety, as contrasted to prematurely terminating patients, who complained more often of purely organic symptoms, getting into trouble, and paranoid and schizoid feelings.—F. N. Arnhoff.

3583. Honig, A. M. **Anxiety in schizophrenia: A contribution to direct analysis.** *Psychoanal. psychoanal. Rev.*, 1960, 47(3), 77-90.—Anxiety is a reaction to the perception of the absence of a love object. Anxiety in schizophrenia is related to the healing ability of a normal maternal instinct. Hallucination in schizophrenia wards off anxiety connected with the primary object. The therapist shows the patient the affects of the bad mother introject. In deep psychosis the family cannot be ignored in treatment. The feeding necessary in resolving a psychosis must be similar in quality to the mental feeding the relaxed mother gives to her newborn infant. Poor mothering caused the psychosis. In severe regression the superego is practically all mother.—D. Prager.

3584. Irvin, Ann M. **Regression in a children's activity therapy group.** *Smith Coll. Stud. soc. Wk.*, 1960, 31, 22-37.—Describes the development of a rating scale for measuring regression manifested during mealtime by members of children's activity therapy groups.—G. Elias.

3585. Kaplowitz, Daniel. (Postgraduate Center for Psychotherapy, N.Y.) **Techniques effecting change in analytically oriented psychotherapy.** *Amer. J. Psychother.*, 1960, 14, 677-690.—7 specific techniques effecting change in analytically oriented psychotherapy are presented and discussed. Included are such procedures as releasing the patient's anxiety and allowing it to mount to the degree where it becomes useful as a motivating factor in overcoming resistance, helping the patient express his feelings toward the therapist by using peripheral approaches, and using active measures by the therapist in order to outwit the patient's neurosis.—L. N. Solomon.

3586. Masserman, J. H., & Moreno, J. L. (Eds.) **Progress in psychotherapy; Review and integrations.** Vol. V. New York: Grune & Stratton, 1960. x, 262 p. \$8.50.—Moreno opens the book with a "psychiatric encounter in Soviet Russia." Ehrenwald then reviews 4 years of progress in psychotherapy. Fundamentals, methods, special techniques, and current applications of psychotherapy are presented in individual articles by different authors. After a section on interdisciplinary integrations and developments abroad, Masserman concludes the book with a chapter called "Battlements and Bridges in the East."—D. Prager.

3587. Newman, Ruth. **The way back: Extramural schooling as a transitional phase of residential therapy.** *Amer. J. Orthopsychiat.*, 1960, 30, 588-598.—Children in residential treatment reach a point where they can attend school in the community. Based on experience with the treatment of 6 hyperaggressive boys in residence at the Child Research Branch of the National Institute of Mental Health, the author discusses determining a child's readiness for extramural schooling, selection of an appropriate school, and criteria for establishing adequate communication between school and institution.—R. E. Perl.

3588. Pervin, Lawrence A. (Harvard U.) **Existentialism, psychology, and psychotherapy.** *Amer. Psychologist*, 1960, 15, 305-309.—The basic elements of existentialism and its relevance to psychology and psychotherapy are considered. "Existentialists are concerned with the meaning of life. . . . The existential analysts emphasize the study of the experiencing individual. Events are looked at in terms of their meaning for the individual. . . . In an attempt to get at the patient's inner universe of experience, the existential analyst studies how the phenomenological coordinates of time, space, causality, and materiality are experienced. . . . Logotherapy focuses upon the search for meaning in human existence." If it is approached as an area representing possible suggestions for further study "existentialism may have much to offer and psychology considerable to gain!"—S. J. Lachman.

3589. Pichot, P., Bailly, R., & Desmedt, D. (Hôpital Psychiatrique Ste. Anne, Paris, France) **Les méthodes de contrôle des thérapeutiques: II. Vérification de la fidélité inter-correcteurs de l'échelle de Wittenborn.** [Methods of evaluating therapy: II. Verification of the interrater reliability of the Wittenborn scale.] *Rev. Psychol. appl.*, 1959, 9, 117-118.—A revised form of the Wittenborn scale was applied by 2 judges to 25 women patients seen in a free service; the group was relatively heterogeneous, including neurotics and psychotics. Phi coefficients for the 9 ratings ranged from .43 to .92; the total was .77, as compared to .63 reported for a previous group.—W. W. Wattenberg.

3590. Pittenger, Robert E., Hockett, Charles F., & Danehy, John J. (George Junior Republic, Freeville, N.Y.) **The first five minutes: A sample of microscopic interview analysis.** Ithaca, N.Y.: Paul Martineau, 1960. x, 264 p. \$6.50.—A detailed analysis of the first 5 minutes of Gill, Newman, Redlich, and Sommers' first interview in *The Initial Interview in Psychiatric Practice: With Phonograph Records* (see 28: 8747). The upper slit-pages are: a typescript of the interview, a phonetic transcription (in symbols of the International Phonetic Alphabet), and a paralinguistic transcription (showing loudness of voice, pitch, sighing, laughter, etc.). The corresponding lower slit-pages are interpretive commentary. Besides this analysis of the 5-minute segment, there is discussion of the authors' methods and of conclusions to be drawn from their work.—F. Auld, Jr.

3591. Rioch, D. Mck. **Recent contributions of neuropsychiatric research to the theory and practice of psychotherapy.** *Amer. J. Psychoanal.*, 1960,

20, 115-129.—Hopefully there is the possibility that much psychiatric morbidity may be dealt with by epidemiological methods, administrative prevention, and utilization of personnel without extensive professional training. The application of military principles of social psychiatry to many situations in civilian life will require much better definition of social group structure and the cultural structure of intergroup systems. Significant data on such social organization may come from clinical investigations.—D. Prager.

3592. Sargent, Helen. **Methodological problems of follow-up studies in psychotherapy research.** *Amer. J. Orthopsychiat.*, 1960, 30, 495-506.—Problems of follow up are discussed together with a description of approaches to follow-up being tried in the Psychotherapy Research Project of the Menninger Foundation. The author discusses factors placing barriers in the way of sound follow-up data collection, the meaning of the data (in view of various sources of distortion), and some of the principles to which the project is committed: the principle of naturalistic method, the principle of control at the level of analysis rather than at the level of data gathering, the principle of scientific "as if" and of the reality of psychological constructs, and the principle of psychosituational interaction.—R. E. Perl.

3593. Shane, M. **Some subcultural considerations in the psychotherapy of a Negro patient.** *Psychiat. Quart.*, 1960, 34, 9-27.—After a review of the literature of psychotherapy of Negroes, a case history is presented illustrating difficulties for patient and therapist when identity problems involving subcultural positions are approached.—D. Prager.

3594. Sher, Elizabeth; Messing, Eleanor; Hirschhorn, Theodora; Post, Enis; Davis, Annette, & Messing, Arthur. **The List method of psychotherapy.** New York: Philosophical Library, 1960. xi, 258 p. \$7.50.—6 papers from therapists trained by Jacob S. List. Topics include: therapist training and selection, higher education as therapy, reception room as therapeutic community, family resistance and client progress, warmth in therapy, and sexual inversion. Psychoanalytic in the manner of the later Ferenczi, List and his students emphasize friendly social relations among patients as well as between patients and therapists.—E. W. Eng.

3595. Sommers, Vita S. **Identity conflict and acculturation problems in Oriental-Americans.** *Amer. J. Orthopsychiat.*, 1960, 30, 637-644.—2 cases of Oriental-Americans are presented to examine the interdependence and cross-influence of psychological and cultural processes in personality functioning, and to demonstrate how psychocultural conflicts can be resolved. Cultural conflict can become an integral part of neurotic problems; the therapist's function is not to acculturate the patient nor to seek any pre-conceived synthesis of cultures, but to work with the cultural material as with any other conflict-laden material in order to resolve the patient's neurosis.—R. E. Perl.

3596. Spiegel, Rose. **Intensive psychotherapy of a nonhospitalized schizophrenic patient.** *Amer. J. Orthopsychiat.*, 1960, 30, 528-538.—A detailed presentation is given of the case of Ellen, who

had an acute schizophrenic break at the age of 20 which leveled off into such good functioning that one might consider it both a social and psychologic recovery.—R. E. Perl.

3597. Taulbee, E. S. (VA Mental Hygiene Clinic, Omaha, Nebr.) **Relationship between certain personality variables and continuation in psychotherapy.** *J. consult. Psychol.*, 1958, 22, 83-89.—"This study investigated the hypothesis that there are certain identifiable personality variables which are related to therapy prognosis. A group of neurotics who remained in treatment for 13 or more interviews and a group who terminated prior to the 13th interview were compared on the basis of certain Rorschach scoring categories and MMPI scales. Both of these groups were compared to a group of normal subjects on the Rorschach variables. As predicted, the continuers were less defensive, and more persistent, anxious, sensitive, and dependent than the attriters. They possessed an increased consciousness of feelings of inadequacy, inferiority, and depression and had better potential for self-appraisal, emotional responsiveness, and more of an introspective attitude."—C. T. Morgan.

3598. Young, William H. **Death of a patient during psychotherapy.** *Psychiatry*, 1960, 23, 103-104.—Presentation and discussion of the problems in facing death with a patient who developed a fatal malignancy during intensive psychotherapy.—C. T. Bever.

3599. Zwick, Paul A. **Gauging dosage and distance in psychotherapy with adolescents.** *Amer. J. Orthopsychiat.*, 1960, 30, 645-647.—In individual therapy with adolescents a limited contact approach is often helpful. It seems that chances for continuity of contact with these tenuously related adolescents can be enhanced by an initial phase of quick, meaningful engagement followed by a long phase of contacts reduced to 3-6 weeks apart.—R. E. Perl.

(See also Abstracts 3673, 3698, 3802)

#### Therapeutic Process

3600. Abel, Theodora M. (Postgraduate Center for Psychotherapy, N.Y.) **Shift in intermediary object-gradient during the course of psychotherapy.** *Amer. J. Psychother.*, 1960, 14, 691-704.—Inanimate objects are used by detached patients to satisfy and control the needs of their organism. 2 cases are presented to illustrate how the dyadic relationship between person and inanimate object gives strength to the weak ego and allows greater interchange between libido and ultimate object.—L. N. Solomon.

3601. Alger, Ian. **Therapy with schizophrenic patients.** *Amer. J. Orthopsychiat.*, 1960, 30, 521-527.—Material from the treatment of one schizophrenic patient is presented to show how, in his active struggle with the patient, the therapist tries to expose the patient's distorted concept of his own uniqueness, of his consideration of other people as dehumanized objects which can be manipulated, and of his disbelief in the possibility of change.—R. E. Perl.

3602. Brody, Morris W. **Observations on direct analysis: The therapeutic technique of Dr.**



**John N. Rosen.** New York: Vantage, 1959. 104 p.—This book presents an interpretation of direct analysis as propounded and practiced by Rosen at the Temple University Medical Center. It is also an evaluation of the proceedings of the 1957 Institute for Direct Analysis, which took place at the center. Contents are: "The Initial Interview—Termination Techniques: Distancing the Patient from the Psychosis"; "The Setting: Direct Analysis, A Group Technique"; "Manipulating Guilt Feelings"; "Modifying the Patient's Superego"; "Breaking Previous Identifications, and Establishing the New Introject"; "The Therapist: His Attitude Towards the Patient"; and "Management of Dream Material." The author states that "the direct analysis of Dr. John Rosen approaches the problem of psychosis through an orientation whereby the ego and the superego of the psychotic have been overwhelmed and instinctual impulses are expressed without restraint. . . it also attempts to find the means and the language of the environment that will help the psychotic patient bring his instinctual impulses under control, and help the ego and the superego gain supremacy over these rampaging impulses."—S. Kasman.

**3603. Elrod, Norman.** "Unglück steckt an": Ein besonderer Aspekt der psychotherapeutischen Situation. ["Misfortune is contagious": A particular aspect of the psychotherapeutic situation.] *Psyche, Heidelberg*, 1960, 14, 336-359.—How can the therapist enable the patient's acceptance of his historically conditioned existential conflict without becoming "infected" by the patient's misfortune? By remaining lucidly open to the patient's situation, but within the limits of the shared reality actually experienced by both therapist and patient. This is the "instant" of openness that always occurs within limits.—E. W. Eng.

**3604. Hora, T.** The process of existential psychotherapy. *Psychiat. Quart.*, 1960, 34, 495-504.—The process of psychotherapy is a segment of life, an event in time. Patients are people with specific ways of experiencing life. In the process of psychotherapy existence becomes manifest and reveals itself to the participants as being-in-the-world in lived time and relationship. In the existential encounter "the experience of the passage of time and the awareness of separation between subject and object are absent." "Letting-be" means the affirmation of the existence of another human being. Therapeutic change occurs as soon as man can see his total situation. Openness is the therapist's main qualification. "Cognition and consciousness are fundamental criteria of mental health; and, along with authenticity of Being, they constitute the central issue in existential psychotherapy."—D. Prager.

**3605. Rogers, Carl R.** (U. Wisconsin) **A therapist's view of personal goals.** (Pendle Hill Pamphlet 108) Wallingford, Pa.: Pendle Hill, 1960. 30 p. \$35.—In this essay, delivered as an address at Haverford College, Pennsylvania, in December 1959, the author addresses himself to man's purpose and his goal in life. In his therapeutic work Rogers sees clients take such directions as: away from façades; away from "oughts"; away from meeting expectations; away from pleasing others; toward being a process; toward being a complexity; toward

openness to experience; toward acceptance of others; toward trust of self. Given a therapeutic climate of warmth, acceptance, and empathic understanding, the client moves from what he is not toward "being," toward becoming that which he inwardly and actually is. This conception does not imply fixity, nor is it based on the belief that man is inherently evil.—H. H. Strupp.

**3606. Sechehaye, M. A.** Techniques de gratifications en psychothérapie analytique. [Gratification techniques in analytical psychotherapy.] *Evolut. psychiat.*, 1960, 25, 297-382.—In schizophrenia, various gratifications exist depending upon whether the origin of the need is in the ego or the id. If the origin is in the ego, a deep relationship can be established between patient and analyst by means of neutral mediators. However, where the ego has disintegrated, symbolic realizations should be applied in accordance with Freud's structural trilogy: id, ego, and superego. Furthermore, in dealing with psychotics, it is important to differentiate between delirious constructions and participation symbols.—L. A. Ostlund.

**3607. Tauber, Edward S.** (NYC) **Sullivan's conception of cure.** *Amer. J. Psychother.*, 1960, 14, 666-676.—Although Sullivan did not make explicit his view as to the nature of mental health, it appears that his conception of cure is contained in the statement that "to the extent to which one knows what is going on in his relations with others, to that extent he is getting better."—L. N. Solomon.

**3608. Wiener, D. N.** (VA Center, St. Paul, Minn.) **The effect of arbitrary termination on return to psychotherapy.** *J. clin. Psychol.*, 1959, 15, 335-338.—"A potentially interminable group of patients was arbitrarily terminated to determine whether interminability could be controlled in this way, without dire consequences. A substantial number of these patients did not return to treatment within six months, and no dire consequences were observed. . . Further questioning seems in order of the assumption that a certain group of patients requires indefinitely long supportive treatment in order to be kept out of trouble, or to improve."—F. N. Arnhoff.

(See also Abstract 3569)

#### Group Therapy

**3609. DeRosis, L. E., Becker, B. J., Wassell, B. B., Kraft, I. A., Abell, R. G.** Sexuality in group psychoanalysis: A round table discussion. *Amer. J. Psychoanal.*, 1960, 20, 197-220.—DeRosis discusses emotional distortion of sexuality. Becker describes sexual rivalry among group members. Wassell speaks of the influence of the therapist's views of sexuality on the group. Kraft studies pseudo-homosexuality in group psychotherapy. Abell deals with the etiology and treatment of the passive male.—D. Prager.

**3610. Freund, R. B.** A patients' autonomous society as a method of group psychotherapy. *Psychiat. Quart. Suppl.*, 1959, 33, 317-332.—The "Patients' Society" is a voluntary group with its own constitution and strict parliamentary rules. In 18 mo. it has given patients who respond favorably to

tranquilizers opportunities to regain self-respect; to take more responsibilities; to make decisions; and to show initiative, ambition, and competitive spirit. The society requests guidance and advice and requires minimal supervision. The society puts out a hospital paper. The society has increased understanding of patients by personnel, has increased the closeness between members and personnel, and has improved the relations between the medical and nursing staffs.—D. Proger.

3611. Grinberg, Leon; Langer, Marie, & Rodriqué, Emilio. *Psychoanalytische Gruppentherapie*. [Psychoanalytic group therapy.] Stuttgart, Germany: Ernst Klett, 1960. 247 p. DM 16.00.—German translation, edited by Werner W. Kemper, of the original Spanish version *Psicoterapia del Grupo: Su Enfoque Psicoanalítico* (1957). Discusses principles and general application of psychoanalytically oriented group therapy. Chapters are: ["Framework and History of Group Therapy"]; ["Social and Therapeutic Groups"]; ["Problems and Practices of Group Therapy"]; ["Formation of Groups"]; ["Integration and Continuity of Therapeutic Groups"]; ["Therapeutic Process in Groups"]; ["Special Groups"], e.g., homogenetic vs. heterogenetic, psychosomatics, psychotics, children, experimental, married couples, etc.; ["Bibliography and Index"].—R. F. Wagner.

3612. Whitman, Roy M., Lieberman, Morton A., & Stock, Dorothy. (U. Cincinnati) *The relation between individual and group conflicts in psychotherapy*. *Int. J. group Psychother.*, 1960, 10, 259-286.—Nuclear conflicts of 2 individuals in a psychotherapy group are studied in relation to the group conflicts expressed by the group. Group events may: (a) leave untouched a problem in an individual; (b) activate both the "disturbing motive" and "reactive motive" sides of conflict, yet give hope of satisfying the disturbing motive; (c) activate both motives, yet give no hope of satisfying the disturbing motive nor diminishing anxieties connected with the reactive motive; and (d) activate the various aspects of a conflict and decrease the anxieties connected with the reactive motive.—M. J. Vargas.

3613. Wilcox, E. Jack, & Hill, William Fawcett. *Group process problems in a team research program*. *Provo Pap.*, 1957, 1(3), 37-53.—An analysis of process problems encountered by a research team studying communication theory as it is applied to group psychotherapy is presented. The topics are: (a) explanations for overlooking process variables, (b) etiology of process problems, (c) characteristic poles of opposition, (d) interaction principles and methods of analysis, and (e) possible solutions. Presented as a case study, the article also describes the methods used to alleviate these typical process problems.—W. Hill.

3614. Wolf, Alexander, & Schwartz, Emanuel K. (11 East 68th St., NYC) *Psychoanalysis in groups: The alternate session*. *Amer. Imago*, 1960, 17, 101-108.—The members of a therapeutic group meet alternately with and without their analyst. Purposes of and objections to the alternate session are discussed.—W. A. Varvel.

(See also Abstract 3568)

#### Special Therapies

3615. Andreev, B. V. *Sleep therapy in the neuroses*. New York: Consulting Bureau, 1960. 114 p. \$8.50.—Report on 91 cases of neurotics (34 neurasthenics, 42 hysterics, and the rest with mixed forms) who were treated with sleep therapy. The treatment took place in a hospital and lasted from 1 to 3 wk. The daily duration of sleep was from 10 to 13 hr. The results show that 84% of the patients were either cured or improved; in 16% there was only slight improvement or no change. A follow-up study was conducted with 27 patients. Altogether 17 patients were in satisfactory condition when examined. The rationale of sleep therapy is the Pavlovian concept of protective inhibition. It is repeatedly stressed that sleep therapy should not be used as an independent method but should be supplemented by psychotherapy.—A. Cuk.

3616. Koegler, Ronald R. (U. California Medical School) *Psychotherapy of schizophrenia*. *Amer. J. Psychother.*, 1960, 14, 648-665.—Role playing and assumption of omnipotent roles are emphasized as important in the treatment of acute schizophrenia. It is also efficacious for the therapist to function simultaneously as the ward physician.—L. N. Solomon.

#### HYPNOSIS & DREAMS

3617. Ambrose, Gordon, & Newbold, George. (London, England) *A handbook of medical hypnosis*. (2nd ed.) Baltimore, Md.: Williams & Wilkins, 1959. xiii, 276 p. \$6.75.—Illustrated by numerous very brief case reports, this book demonstrates the usefulness of hypnosis in the treatment of a great variety of disorders. After a conventional history of hypnosis, some discussion of the legal problems which arise, brief descriptions of some of the theories of hypnosis, some of the more familiar hypnotic phenomena, and several methods of induction, the authors take up in turn: hypnosis in general medicine, in the neuroses, in anaesthesia, in paediatrics, in gynaecology and obstetrics, and in dermatology.—S. Glasner.

3618. Bonello, Frank J., Doberneck, Raymond C., Papermaster, Aaron A., Griffin, Ward O., Jr., & Wangenstein, Owen, H. *Hypnosis in surgery: I. The post-gastrectomy dumping syndrome*. *Amer. J. clin. Hypnosis*, 1960, 2, 215-219.—A total of 36 patients were treated with hypnotherapy for the postgastrectomy dumping syndrome. 20 patients (56%) experienced symptomatic relief and weight gain. These results were felt to be reassuring and warrant continued use of the method.—M. V. Kline.

3619. Das, J. P. (Cuttack, India) *Factor analysis of a hypnotic scale*. *Indian J. Psychol.*, 1958, 33, 97-100.—A scale of 8 items of suggestion based on the work of Davis and Husband (1931) and Friedlander and Sarbin (1938) was given to 67 male students ranging from 16 to 26 years of age. Factor analysis revealed "a strong general factor of hypnotizability."—C. T. Morgan.

3620. Haley, J. (Stanford U.) *The control of fear with hypnosis*. *Amer. J. clin. Hypnosis*, 1960,

2, 109-115.—It is known that a variety of kinds of psychotherapy as well as hypnosis will relieve irrational fear. It is argued that the interpersonal context in which these changes take place is one where the therapist is influencing and controlling the behavior of the patient and that this can only succeed if the therapist accepts the patient's behavior and defines it as cooperation rather than opposition.—M. V. Kline.

3621. Heath, E. S., Hoaken, P. C. S., & Sainz, A. A. Hypnotizability in state-hospitalized schizophrenics. *Psychiat. Quart.*, 1960, 34, 65-68.—9 of 34 schizophrenics selected randomly could be easily hypnotized into a light trance or deeper. The unsuccessful cases were chiefly uncooperative, lobotomized, or deteriorated.—D. Prager.

3622. Kleitman, Nathaniel. (U. Chicago) Patterns of dreaming. *Scient. American*, 1960, 203 (5), 82-88.—Dreams are accompanied by certain characteristic types of brain wave and eye movement. This discovery has enabled investigators to answer several long-standing questions about dreaming: everybody dreams repeatedly every night, the course of time in dreaming is about the same as in waking, external events may or may not affect the content of dreams, most dream experience in normal sleep is never recalled. The mechanism that spaces the episodes of dreaming is unknown. The curtailment of dreaming time produces anxiety, irritability, a greater appetite and a gain in body weight in experimental Ss. The objective indicator that a sleeper is dreaming is not infallible. Of the 4 criteria (cycle of eye movement, EEG, pulse and respiration rate change, motionlessness) the most reliable is the brain-wave pattern.—L. A. Wauch.

3623. Levitt, Eugene E., den Breeijen, Arie, & Persky, Harold. (Indiana U. Medical Center) The induction of clinical anxiety by means of a standardized hypnotic technique. *Amer. J. clin. Hypnosis*, 1960, 2, 206-214.—Techniques employed by other investigators for the experimental production of an emotional state by means of hypnotic induction are described. On the basis of a logical analysis of these methods an hypnotic suggestion for the production of an anxiety state was devised.—M. V. Kline.

3624. Moodie, William. *Hypnosis in treatment*. New York: Emerson, 1960. 168 p. \$4.00.—Deals with hypnosis as a procedure for gaining access to the "deeper realms of the mind," and as a form of therapy. The text concerns the selection of patients for treatment, the induction of deep relaxation or light hypnosis, varying depths in the hypnotic state, and the conduct of hypnoanalysis. The use of hypnotherapy in the treatment of specific conditions—depression, hypochondria, nasal congestion, colitis, emotional immaturity, behavior disorders in children—is reviewed.—T. X. Barber.

3625. Newman, Richard; Katz, Jay; Rubenstein, Robert. The experimental situation as a determinant of hypnotic dreams. *Psychiatry*, 1960, 23, 63-73.—In an experimental situation using hypnosis the hypnotic relationship influences the data obtained. Hypnotic dreams express the S's per-

sonal problems, his feelings about being a research subject, and the setting.—C. T. Bever.

3626. Papermaster, Aaron A., Doberneck, Raymond C., Bonello, Frank J., Griffen, Ward O., Jr., & Wangenstein, Owen H. Hypnosis in surgery: II. Pain. *Amer. J. clin. Hypnosis*, 1960, 2, 220-224.—Hypnotherapy has been found to be a very worthwhile therapeutic measure to allay the fears and anxieties of patients who are about to undergo surgery and to reduce the pain and discomfort in the postoperative period. Hypnotherapy is not intended to supplant existing useful techniques in the management of pain and discomfort but to be used rather as an adjunct to surgical therapy which simplifies and accelerates convalescence.—M. V. Kline.

3627. Trosman, Harry; Rechtschaffen, Allan; Offenkrantz, William, & Wolpert, Edward. (U. Chicago) Studies in psychophysiology of dreams: IV. Relations among dreams in sequence. *Arch. gen. Psychiat.*, 1960, 3, 602-607.—106 dreams of 2 Ss awakened during 32 nights when body movements interrupted rapid eye movements were rated on a 7-point-scale along 12 dimensions. Manifest dream characteristics during the same night were irregular, but some regular patterns were suggested. A cyclic relationship was observed in the latent contents. Tension builds up, is discharged by a dramatic visual representation and followed by regression. Dreaming seems to be a partial ego function which is used for tension discharge and conflict resolution.—L. W. Brandt.

3628. Ullman, M. The social roots of the dream. *Amer. J. Psychoanal.*, 1960, 20, 180-196.—There is need for clarification of the biological adaptive role of the dream. The dream is a potential tool for extending knowledge of the molding influences of the social and cultural milieu of the individual. The source of unconscious motivating influences is linked to specific experiences in a given cultural and social milieu and not in the biological nature of man.—D. Prager.

3629. Vogel, Gerald. (U. Chicago) Studies in psychophysiology of dreams: III. The dream of narcolepsy. *Arch. gen. psychiat.*, 1960, 3, 421-428.—The dream during a narcoleptic attack and the associations to it by a 42-year-old married Negro patient whose case is reported show that "the narcoleptic sleep allowed gratification of a specific unacceptable fantasy through the particular mechanism of dream fulfillment. . . . In other words, normal subjects dream to preserve sleep; narcoleptics sleep to dream." (24 ref.)—L. W. Brandt.

3630. Weitzenhoffer, Andre M. (Stanford U.) Unconscious or co-conscious? Reflections upon certain recent trends in medical hypnosis. *Amer. J. clin. Hypnosis*, 1960, 2, 177-198.—An attempt to point out and elucidate certain basic ambiguities which exist in connection with the use of the term "unconscious" in current hypnotic practice. It is pointed out that it is not at all certain that such therapeutic results as have been obtained using the patient's "unconscious" were brought about by the activities of the "unconscious" per se. The need for careful study is highly indicated.—M. V. Kline.

(See also Abstract 2979)

## CASE STUDIES &amp; CASEWORK

3631. Bornstein, B., & Tamarin, G. (Tel Aviv, Israel) **Examen psychometrique d'un cas de prosopagnosie.** [Psychometric examination of a case of prosopagnosia.] *Rev. Psychol. appl.*, 1959, 9, 109-116.—Records are given on the testing of a 65-year-old male victim of prosopagnosia who suffered from a relatively weak and episodic inability to recognize familiar faces and from fluctuating difficulties in spatial orientation accompanied by feelings of confusion. Neurological examinations were negative. The psychometric tests used were the Bender Gestalt, the Revised Beta Examination, the Szondi Test, and the Rorschach. The difficulty was traced to a discrete cerebral organic trouble.—*W. W. Wattenberg.*

3632. Ellis, A. (333 W. 56th St., NYC) **A homosexual treated with rational psychotherapy.** *J. clin. Psychol.*, 1959, 15, 338-343.—*F. N. Arnhoff.*

3633. Federn, Ernst. **Some clinical remarks on the psychopathology of genocide.** *Psychiat. Quart.*, 1960, 34, 538-549.—The autobiography of Rudolf Hoess was published in 1959. Hoess was taught from childhood to be absolutely obedient and meticulously tidy and clean. Hoess never established any real feelings for people, compulsively supervised scenes involving murder of women and children, and turned his violent hatred of Prussian discipline into immovable blind obedience against a weak mother symbol. Hitler's policy reinforced Hoess's pathological obedience. The Hoess story could have happened anywhere. Hoess was not a psychopath but a compulsive and schizoid character disorder with a schizophrenic core.—*D. Prager.*

3634. Polansky, Norman A. (Ed.) (Highland Hosp., Asheville, N.C.) **Social work research.** Chicago, Ill.: Univ. Chicago Press, 1960. vii, 306 p. \$5.00.—A handbook of methodology and methods in social work research produced by 14 authors under the auspices of the Research Section of the National Association of Social Workers. Chapters are titled: "Social Work Research: A Perspective," "Problem Identification and Formulation," "The Design of Research," "Some Principles and Methods of Sampling," "Principles of Measurement," "Use of Available Material," "Collecting Original Data," "Research Reporting," "Measurement of Need," "Cost Analysis of Social Work Service," "Measuring the Effect of Social Work Intervention," "Field Experiments and Demonstrations."—*L. S. Kogan.*

3635. Rettig, Salomon, & Pasamanick, Benjamin. (Columbus Psychiatric Inst. & Hosp., O.) **Status, work satisfaction and variables of work satisfaction of psychiatric social workers.** *Ment. Hyg.*, NY, 1960, 44, 48-54.—A report on the study of state employed psychiatric social workers with particular reference to status and work satisfaction. Psychiatric social workers aspire to a higher status level than is actually given them by other professional and lay workers in the work milieu. Most of them, however, believe that they actually attain the status level to which they aspire.—*M. A. Seidenfeld.*

3636. Scott, E. M. (Eastern Oregon State Hosp.) **A case of folie à deux and projective**

**techniques.** *J. consult. Psychol.*, 1958, 22, 90.—*C. T. Morgan.*

3637. Tallent, N., & Reiss, W. J. (VA Center, Kecoughtan, Va.) **Multidisciplinary views on the preparation of written clinical psychological reports: Acceptability of certain common content variables and styles of expression.** *J. clin. Psychol.*, 1959, 15, 273-274.—Sampled opinions of psychiatrists, psychologists, and psychiatric social workers on aspects of psychological reporting. Variations in preference found for both content and style.—*F. N. Arnhoff.*

3638. Wasserman, Sidney. (Bellefaire, Cleveland, O.) **Casework treatment of a homosexual acting-out adolescent in a treatment center.** *Ment. Hyg.*, NY, 1960, 44, 18-29.—A casework report on the treatment of an individual adolescent homosexual in which the outcome is socially satisfactory.—*M. A. Seidenfeld.*

(See also Abstract 2934)

## PSYCHIATRIC SERVICES

3639. Brill, Norman Q., & Storrow, Hugh A. (U. California, Los Angeles) **Social class and psychiatric treatment.** *Arch. gen. Psychiat.*, 1960, 3, 340-344.—Upper-class patients have a significantly greater chance of being accepted for treatment in a low income outpatient mental health clinic than lower-class patients. When Hollingshead's 5 social classes are considered separately the difference disappears. No relationship between class and training of therapist, age, sex, or diagnostic category of patient was demonstrated. For 147 patients whose treatment had been terminated no significant correlation was found between class and number or frequency of interviews or judged response to therapy. Significant class differences were found regarding estimated intelligence, amount of education, desire for and understanding of psychotherapy, interviewers' feelings towards and estimated treatability of patients. Other methods than psychotherapy should be used for treatment of less sophisticated patients.—*L. W. Brandt.*

3640. Klerman, Gerald L., Sharaf, Myron R., Holzman, Mathilda, & Levinson, Daniel J. (United States Public Health Service, Bethesda, Md.) **Sociopsychological characteristics of resident psychiatrists and their use of drug therapy.** *Amer. J. Psychiat.*, 1960, 117, 111-117.—*N. H. Pronko.*

3641. Kobi, Emil, & Haffter, Regina. **Über einige heilpädagogische Einrichtungen der Stadt Wien.** [About some psychological treatment facilities in Vienna.] *Heilpädagog. Werkbl.*, 1960, 29, 231-239.—This survey of outpatient psychological treatment facilities for children in Vienna, Austria, describes 3 such facilities in detail as to personnel, size, plant, types of cases accepted, methods of diagnosis and treatment, interaction and division of labor among personnel, and other activities such as research.—*D. F. Mindlin.*

3642. Lytton, George J., Knobel, Mauricio, & MacNeven, Robert W. **The function of a psychiatric diagnostic unit in the school system.** *Amer. J. Orthopsychiat.*, 1960, 30, 581-587.—*Kansas*



City's Child Research Council is described from its inception to its present position as a functioning unit of a large school system. Its object was to investigate ways of meeting the need for service for emotionally disturbed children in the public school, a service program for certain select children, and participation in an in-service training program.—*R. E. Perl.*

3643. Nilsson, Gertrude L., & Kurland, Albert A. (Spring Grove State Hosp., Baltimore, Md.) **The general practicing physician as a resource for the mentally ill.** *Ment. Hyg., NY*, 1960, 44, 103-104.—The question has been raised regarding the resource that families turn to when the first recognition of severe mental illness in a member of the family arises. The authors' briefly describe their findings based upon a study of the prehospital medical histories of 100 patients admitted to Spring Grove State Hospital. These patients were 40 men and 60 women between 18 and 65 years of age who were considered suitable for drug therapy. 50% were admitted to the hospital for the first time. Of the total group, 22% had made no effort to get medical treatment whether or not they knew they were mentally ill, 17% turned to the state hospital as their first medical resource. 60 of the patients had applied for extramural medical attention; 42 had first turned for aid to a physician who was not a specialist in psychiatry. For 11 of the patients, a nonpsychiatric physician was their sole medical resource.—*M. A. Seidenfeld.*

3644. Reznikoff, M., Brady, J. P., & Zeller, W. W. (Inst. Living, Hartford, Conn.) **The psychiatric attitudes battery: A procedure for assessing attitudes toward psychiatric treatment and hospital.** *J. clin. Psychol.*, 1959, 15, 260-266.—Development of an objective and quantitative attitudinal profile for the systematic study of the influence of attitudes on patient behavior and the clinical course of illness.—*F. N. Arnhoff.*

3645. Swartz, Jacob. (Boston U. School Medicine) **Emotional reactions of patients and medical personnel to respiratory poliomyelitis.** *Ment. Hyg., NY*, 1960, 44, 97-102.—The emotional reactions of 6 patients with bulbar polio who were confined to respirators and the reactions of the medical personnel engaged in their care was studied. The common denominator in the reaction of the respirator patients was a combination of feelings of anxiety, hopelessness, helplessness, and depression manifested in dependency, aggressiveness, and lack of cooperation. It is not surprising to note that staff experienced a sense of "daily drain upon the emotional resources." The need for psychiatric support for both staff and patients is stressed.—*M. A. Seidenfeld.*

3646. Tramer, M. **Zur Entwicklung der Kinderpsychiatrie.** [The development of child psychiatry.] *Acta paedopsychiat.*, 1960, 27, 238-251.—4 stages exist in the history of child psychiatry: last ½ of the 19th century—concern with feeble-mindedness; early 20th century—deliberate attention to other disturbances; the various areas of psychopathology are investigated separately; from 1933—a special medical discipline with its own diagnostic, prognostic, and etiologic problems and methods. The principle problems in child psychiatry are: schizophrenia, schizoid psychopathy, infantile mutism; pathopsychosomatics;

somatopsychics; retardation and acceleration; adequate training of doctors; classification in child psychiatry.—*G. Rubin-Rabson.*

(See also Abstract 3901)

#### Psychiatric Care

3647. LaVietes, Ruth L., Hulse, Wilfred C., & Blau, Abram. **A psychiatric day treatment center and school for young children and their parents.** *Amer. J. Orthopsychiat.*, 1960, 30, 468-482.—A day treatment center and school for emotionally disturbed young children is described. It was initiated in 1956 as a pilot project affiliated with Mt. Sinai Hospital. Psychiatric treatment of child and parents is combined with a therapeutic school. The authors conclude that for certain types of children this service seems to offer greater benefits than could be expected from other community resources.—*R. E. Perl.*

#### Institutional Care

3648. Beley, A. **L'hôpital psychiatrique est-il bien fait pour l'enfant? [Is the psychiatric hospital good for children?]** *Hyg. ment.*, 1960, 49, 233-256.—The care of mentally defective children and children with behavioral problems in French mental hospitals is criticized. The hospitals are organized under the provisions of a law passed in 1838. The presumptions of the present arrangement, which are for adults only, that these children are ineducable, and that the medical service alone is adequate to care for them. The place of psychotherapy and other therapeutic means developed by the social sciences has not been adequately recognized.—*W. W. Meissner.*

3649. Clancey, I. L. W. (Saskatchewan Hosp., Canada) **Primary functions in a mental hospital.** *Ment. Hosp.*, 1960, 11(5), 20-25.—5 primary functions essential to the attainment of hospital goals are identified and analyzed in terms of the interaction of patient and staff roles. Using such a functional analysis, the hospital administrator should delegate authority to perform these functions in terms of specific areas of individual competence of staff and not in terms of total competence or along disciplinary lines.—*L. Gurel.*

3650. Coser, Rose Laub. **Laughter among colleagues.** *Psychiatry*, 1960, 23, 81-89.—The specifically social functions of humor are presented as it occurred during 20 mental hospital staff conferences. It disguises aggression, rather rigidly reflects hospital hierarchy in its direction and content, bridges value conflicts, and helps to articulate roles.—*C. T. Bever.*

3651. Cowen, J. R., & Schwartz, L. **An experiment in the utilization of a clinical psychologist as a ward administrator in a state psychiatric hospital.** *Psychiat. Quart.*, 1960, 34, 472-479.—Through the employment of the psychologist, social and psychological care was given to a group of patients who otherwise would have received marginal attention. Administrative tasks which had been neglected for years were carried out for these patients. Initially the clinical psychologist needs considerable orientation and supervision for this role.—*D. Prager.*

3652. Deane, William N. (Vermont State Hosp., Waterbury) **Intellectual stimulation for chronic**

schizophrenic. *Ment. Hosp.*, 1960, 11(8), 45-46.—"A lecture series with its speakers drawn about equally from the community and from the hospital is proving to be an effective tool in the rehabilitation of chronic schizophrenic patients at this institution." *L. Gurel*.

3653. Etzioni, Amitai. Interpersonal and structural factors in the study of mental hospitals. *Psychiatry*, 1960, 23, 13-22.—Ideas of industrial relations theory have been transferred and applied to the analysis of mental hospital structure benefitting the new studies and the theory of organization. The inappropriate and incomplete use of the human-relations approach in some studies seem to overemphasize: the importance of communication, the totality of the institution, and the benefits of participation in decision-making conferences while neglecting the study of realistic structural factors.—*C. T. Bever*.

3654. Hacken, E., & Hunt, R. C. Open ward management of acute patients in a multi-story building. *Psychiat. Quart. Suppl.*, 1959, 33, 189-196.—It was realized how powerfully antitherapeutic the locked door could be when patients given honor cards to leave the ward showed sudden improvement after no apparent results with all types of intensive treatment.—*D. Prager*.

3655. Ishiyama, Toaru, & Grover, William L. (Cleveland State Hosp., O.) From custody to treatment. *Ment. Hosp.*, 1960, 11(5), 34-36.—The custodial orientation of a large state hospital is seen as deriving from overcrowding, chronicity of patients, and gross understaffing. Since sheer size and emphasis on dyadic relationships are thought to perpetuate the orientation, the use of small teams and efforts at sociotherapy are suggested as remedies.—*L. Gurel*.

3656. Katz, Jay, & Goldstein, Joseph. (Yale U. School Medicine) Dangerousness and mental illness. *J. nerv. ment. Dis.*, 1960, 131, 404-413.—Some observations are made on the extent to which the community through its legislature, courts, and mental hospitals may determine the detention or release of persons who have been committed to a mental institution upon their acquittal by reason of insanity.—*N. H. Pronko*.

3657. Seager, C. P. (Bristol Mental Hosp., England) An interim report on open hospitals in Great Britain. *Ment. Hosp.*, 1960, 11(4), 21-25.—The author sets out "in this article . . . to describe some of the changes . . . in my own and other hospitals in Britain to discourage institutionalization and to prevent the continued accumulation of large groups of patients."—*L. Gurel*.

(See also Abstract 3714)

#### COUNSELING & GUIDANCE

3658. Berdie, Ralph F. (U. Minnesota) Counseling principles and presumptions. *J. counsel. Psychol.*, 1959, 6, 175-182.—The definition of counseling is considered; and the purposes, values, ethics, and other aspects are discussed from the viewpoint of existing dogma. "The process of transmitting presumption into principle, and principle into dogma" is presented.—*M. M. Reece*.

3659. Berenson, Bernard G., Biersdorf, Kathryn C., Magoon, Thomas M., Maxwell, Martha J., Pumroy, Donald K., & Richey, Marjorie H. (U. Maryland) A check-list for recording test taking behavior. *J. counsel. Psychol.*, 1960, 7, 116-119.—"A testing behavior checklist was developed which provides a systematic method for psychometrists to collect and record their observations of clients . . . [with] promising degrees of reliability . . . and validity."—*M. M. Reece*.

3660. Curran, Charles A. (Loyola U., Chicago) The counseling relationship and some religious factors. *J. counsel. Psychol.*, 1959, 6, 266-270.—In this paper presented at the 1958 American Psychological Association symposium on Religious Factors and Values in Counseling, parallels in counseling and religion are drawn with reference to the relationship between client and counselor, the commitment of self, communion, love and acceptance, and optimism. "... religion suggests a third dimension in the psychosomatic relationship of the self and the other—this third dimension is the theological need in man."—*M. M. Reece*.

3661. Drayer, C., & Schlesinger, Elfriede G. (Jewish Hosp. Brooklyn, N.Y.) The informing interview. *Amer. J. ment. Defic.*, 1960, 65, 363-370.—The purpose and techniques of the informing interview which is held with parents following initial diagnostic study of a child at the Morris J. Solomon Clinic are described. This interview is described as a medium for acquainting the parents with the clinic's findings and for establishing a sound basis for future contacts.—*V. M. Staudt-Sexton*.

3662. Hoffman, Simon. Diagnosis and evaluation in counseling. *Personnel guid. J.*, 1959, 38, 229-231.—A diagnostic process is presented in which the client shares; the counselor is a facilitator who helps the client develop self-understanding as a basis for achieving a more comfortable or satisfying life situation.—*S. Kavruck*.

3663. Hunter, William F. (Michigan State U.) The psychologist works with the aged individual. *J. counsel. Psychol.*, 1960, 7, 120-126.—The sociological, somatic, and psychological aspects of old age are considered with reference to adjustment and counseling. Techniques and procedures in the individual interview and group counseling of the aged are discussed.—*M. M. Reece*.

3664. Kagan, Henry E. (Sinai Temple, Mount Vernon, N.Y.) Psychotherapy as a religious value. *J. counsel. Psychol.*, 1959, 6, 263-266.—As a participant in the 1958 American Psychological Association symposium on Religious Factors and Values in Counseling, the author compares religion and psychology. The psychologist's view of religious values and the clergyman's role as psychologist in counseling are considered. The different viewpoints are illustrated by the approach to the concept of guilt.—*M. M. Reece*.

3665. McElwain, D. W. The psychological imperative. *Aust. J. Psychol.*, 1960, 12, 40-57.—Certain common principles seem to underlie psychologists' advice irrespective of the area of counseling. Among these the author discusses the following: respect for and emphasis upon personal responsibility; emphasis upon face-to-face personal relationships;

recognition of individual differences; awareness of the importance of sympathy, human understanding, or love.—P. E. Lichtenstein.

3666. Mann, Kenneth W. (Hosp. Good Samaritan, Los Angeles, Calif.) **Religious factors and values in counseling: Their relationship to ego organization.** *J. counsel. Psychol.*, 1959, 6, 259-262.—A theoretical value framework for mental health to be used in psychotherapy is presented. It comprises "three possible levels of ego organization or the self-system which reflect respectively three different, although necessarily interacting sets of values, as follows: 1. the values of relatively immediate gratification, 2. the values of social responsibility, and 3. the values of philosophy of existence." This paper was given in the 1958 American Psychological Association symposium on Religious Factors and Values in Counseling.—M. M. Reece.

3667. Meehl, Paul E. (U. Minnesota) **Some technical and axiological problems in the therapeutic handling of religious and valuational material.** *J. counsel. Psychol.*, 1959, 6, 255-259.—In a paper given for the 1958 American Psychological Association symposium on Religious Factors and Values in Counseling, the author discusses the problems in handling material concerned with religion or values in psychotherapy. He concludes that, lacking scientific proof, the psychotherapist must be free from dogma and be openminded when value problems and religious problems emerge.—M. M. Reece.

3668. Muench, George A. **An evaluation of student mental health services.** *Amer. J. Orthopsychiat.*, 1960, 30, 608-617.—Certain research trends deserve the particular attention of those involved in college mental health work: (a) assessing the treatability of clients, (b) assessing the cultural influences upon psychotherapy, (c) assessing the length of case in psychotherapy, (d) the personality of the therapist, and (e) the relationship between therapist and client. (46-item bibliogr.)—R. E. Perl.

3669. Nachmann, Barbara. (U. Michigan) **Client problems and duration of counseling.** *Personnel guid. J.*, 1960, 38, 486-488.—Conventional psychopathological diagnoses are relevant to the problem of duration of counseling. Other factors pertinent to duration are presented.—S. Kavruck.

3670. Schwebel, Milton. (New York U.) **Counselor intervention in resistance and ignorance.** *Personnel guid. J.*, 1960, 38, 480-485.—It is urged that a concerted research effort be made in the area of client resistance. The role of the counselor in such research is suggested.—S. Kavruck.

3671. Segal, Stanley J. (U. Michigan) **The role of the counselor's religious values in counseling.** *J. counsel. Psychol.*, 1959, 6, 270-274.—As a lay counselor participating in the 1958 American Psychological Association symposium on Religious Factors and Values in Counseling, the writer asserts that the counselor's values should not be forced on the client. "The counselor needs to be mature enough about his own religious values that he can, in his role of counselor, allow the client to question these very same values without selecting a goal for the client." Adherence to religious values should be viewed in terms of "the emotional dynamics it holds for the client."—M. M. Reece.

3672. Tuckman, J., & Lavell, M. (Dept. Public Health, Philadelphia, Pa.) **Social status and clinic contact.** *J. clin. Psychol.*, 1959, 15, 345-348.—"The relationship between social status based on father's occupation, and clinic contact was studied in a sample of 780 white children admitted to psychiatric outpatient clinics. It was found that higher status patients were no more likely than were lower status patients to maintain contact at any phase of the clinic process: intake, diagnostic evaluation, and treatment." (17 ref.)—F. N. Arnoff.

3673. Tyler, Leona E. (U. Oregon) **Minimum change therapy.** *Personnel guid. J.*, 1960, 38, 475-479.—The duration of counseling contacts can best be controlled by respecting what each client now is and lending him support and understanding while he comes to terms with his unique self.—S. Kavruck.

3674. Veil, C. **Problèmes psychiatriques à l'examen d'orientation professionnelle.** [Psychiatric problems in vocational counseling.] *BINOP*, 1960, 16, 248-257.—Some guidance counselors give insufficient attention to personality traits or psychopathological factors. Certain failures in training or apprenticeship which have been attributed to lack of capacity, poor discipline, etc., are problems in psychopathology. Poor work adjustment may be either cause or effect of psychiatric problems. Research to improve psychiatric evaluation includes: psychopathology of work, improvement of techniques for detection of problems, analyses of records of counselees who have become ill or handicapped.—F. M. Douglass.

3675. Weitz, Henry. (Duke U.) **Creating a climate for accepting guidance services.** *Personnel guid. J.*, 1959, 38, 190-194.—In order to create an effective climate for the acceptance of guidance services, 2 conditions are necessary: agreement among members of community on the major purposes of the guidance program and the enlistment of active participation of all persons with responsible roles in the guidance process. Steps to attain these goals are suggested.—S. Kavruck.

(See also Abstracts 2944, 3472, 3940)

#### MARRIAGE & FAMILY PROBLEMS

3676. Eastman, D. (Columbia U. Teachers Coll.) **Self acceptance and marital happiness.** *J. consult. Psychol.*, 1958, 22, 95-99.—"With a sample of 50 couples married more than two years it was shown that: Marital happiness is related to self acceptance, acceptance of others, and psychological status in both subjects and their mates; to self acceptance in both sexes, to acceptance of others probably only in wives, and to psychological status probably only in husbands. The relation of marital happiness to self acceptance, acceptance of others, and psychological status is affected in several other measurable ways by average psychological differences between the two sexes."—Author summary.

3677. Epstein, Nathan B., & Westley, William A. (McGill U.) **Parental interaction as related to the emotional health of children.** *Soc. Probl.*, 1960, 8, 87-92.—The most important factor related to the emotional health of 9 very emotionally healthy adolescents was found to be the maintenance of the tradi-

tional, semipatriarchal Anglo-Saxon family role relationships. A most significant and unexpected finding was that the sex relationship of the parents was not a valid indication of the emotional health and level of integration of the family unit.—R. M. Frumkin.

3678. Freedman, Deborah S., Freedman, Ronald, & Whelpton, Pascal K. (U. Michigan) **Size of family and preference for children of each sex.** *Amer. J. Sociol.*, 1960, 66, 141-146.—Preference for at least one child of each sex has a minor, but significant, influence in determining whether couples with 2, 3, or 4 children expect to have and do have an additional child. This relationship was found to persist with the number of children of identical sex. The analysis is based on the data from a national probability sample of white married women in the child-bearing years.—R. M. Frumkin.

3679. Herbert, W. L., & Jarvis, F. V. **The art of marriage counseling: A modern approach.** New York: Emerson Books, 1960. 125 p. \$2.75.—A very brief and elementary, but sound introduction to marriage counseling, illustrated by a few fairly detailed case studies. Discusses: the inadequacy of "advice," the bases for marital conflict in personality, the relationship between counselor and client, interviewing, case recording and case conferences, and legal aspects of marriage counseling.—S. Glasner.

3680. Luckey, Eleanor B. **Marital satisfaction and congruent self-spouse concepts.** *Soc. Forces*, 1960, 39, 153-157.—"Within the limits of this study which includes samples which were selected, and evaluative instruments which are paper-and-pencil, it can be safely concluded that the congruence of the wives' perceptions of their husbands and their husbands' own self concept is significantly related to satisfaction in marriage. It was not found true of concepts of wives held by their husbands. The meaning of this difference can be clarified only by further investigation both into perception and factors within the marital relationship."—A. R. Howard.

3681. Rapoport, Rhona. **The family and psychiatric treatment: A conceptual approach.** *Psychiatry*, 1960, 23, 53-62.—The conceptual framework for analyzing family relationships and role performance of psychiatric patients is summarized and applied to a specific clinical situation. The use of relationship material in treatment is discussed in regard: to how the psychiatric patient comes to be thus defined, to the pervasiveness of the behavior patterns and the disorder in the family, to the fit between social roles and the pathological aspects of anyone's behavior, and to the relationship of family norms to those of the treatment institution.—C. T. Bever.

3682. Vogel, E. F., & Bell, N. W. **The emotionally disturbed child as a family scapegoat.** *Psychoanal. psychoanal. Rev.*, 1960, 47(2), 21-42.—Data for this paper were derived from study of 9 disturbed families and a matched group of well families. In all of the disturbed families, but none of the well families, the children became pathologically involved in the tensions existing between the parents. The paper is concerned with the manner in which the emotionally disturbed child is used as a scapegoat for the conflicts between the parents

and the functions of such scapegoating for the entire family.—D. Prager.

3683. Vogel, Ezra F. **The marital relationship of parents of emotionally disturbed children: Polarization and isolation.** *Psychiatry*, 1960, 23, 1-12.—9 families with emotionally disturbed children matched with 9 families with relatively healthy children were intensively studied in a psychiatric clinic by an interdisciplinary team for 1-4 years. Focus on the crucial marriage relationship provides a broader background for considering the personality development of emotionally disturbed children. Description and contrast of a "disturbed" lower-middle-class, Catholic, Irish-American family with a "non-disturbed" control illustrate the pathological processes of polarization which maintains a hostile equilibrium, and of isolation utilized to minimize disruption. The disturbed child frequently seems to serve as scapegoat in the preservation of the marital bond.—C. T. Bever.

(See also Abstract 2938)

#### MENTAL HEALTH & REHABILITATION

3684. Alt, Herschel. **Residential treatment for the disturbed child: Basic principles in planning and design of programs and facilities.** New York: International Univer. Press, 1960. xiii, 437 p. \$7.50.—Major emphasis is on tracing the evolution of the Jewish Board of Guardians' Hawthorne Cedar Knolls School residential treatment program, its evolving philosophy, interdisciplinary functioning, treatment setting, social milieu, and evaluation. Illustrated with case material. Community factors in planning children's facilities are considered. The last section offers 3 detailed reports of Hawthorne's experiences with a delinquent boy and girl, and with a schizophrenic boy. (15-p. bibliogr.)—H. P. David.

3685. Black, B. J. **The protected workshop in the rehabilitation of the mentally ill.** *Psychiat. Quart. Suppl.*, 1959, 33, 107-118.—With understanding in the work setting, the application of preventive psychiatry will eventually keep many mentally ill people on their jobs and out of mental hospitals. Payment for work is a powerful incentive for the rehabilitation of the psychotic patient. Premonitory symptoms should be fed back to the clinical and therapeutic staff from the workshop. Data thus become available to design a psychological prosthesis to prevent relapse after graduation from the sheltered workshop setting. It is difficult to find concurrent intensive psychiatric therapy for those in the workshop. There is also a constant tug between the productivity requirements of the industrial setting and the therapeutic desires of the therapeutic staff.—D. Prager.

3686. Brody, D. S. (Oregon Coll. Education) Sexsmith, H. S., & Sexsmith, D. G. **Teacher education in a mental hospital.** *Ment. Hosp.*, 1960, 11(5), 48-49.—An attempt "(1) to provide selected . . . students in education with experience in teaching emotionally disturbed children and adolescents, and (2) to provide academic instruction to children . . . at the state hospital" was embodied in a regular credit course. 4 years of experience with the



program are reported, with emphasis on benefits to patients and to teachers.—*L. Gurel*.

3687. **Chen, Edith, & Cobb, Sidney.** (U. Pittsburgh) **Family structure in relation to health and disease: A review of the literature.** *J. chronic Dis.*, 1960, 12, 544-567.—"The focus of this report is on simple easily measured aspects of the family, and on the ways in which they appear to relate to psychosomatic and mental diseases and to certain aspects of health. The data reviewed . . . [are] subdivided into five categories for presentation: parental deprivation, sibship size, position in the sibship, marital status, and number of children. First the literature on each variable . . . [is] presented along with a discussion of the problems of competent measurement. Then the possible usefulness of each variable and its value for future research . . . [are] considered." (170-item bibliogr.)—*V. G. Laties*.

3688. **Diller, Leonard.** (New York U., Bellevue Medical Center) **Psychological theory in rehabilitation counseling.** *J. counsel. Psychol.*, 1959, 6, 189-193.—Theory is related to practical problems in rehabilitation. The services concerned with furnishing information, counseling, "uncovering" psychotherapy, and supportive psychotherapy are described in terms of social learning and personality variables.—*M. M. Reece*.

3689. **Durling, Dorothy.** (Wrentham State School, Mass.) **State hospitals make a new start in vocational rehabilitation.** *Ment. Hyg., N.Y.*, 1960, 44, 105-110.—The author mailed a questionnaire to 215 state hospitals listed by the National Institute of Mental Health seeking information regarding the number of patients leaving the hospital during a 3-year period, the number who received vocational rehabilitation during the same period, a description of the planned vocational education offered during the period of hospitalization, pay for patients, daywork, and the nature of vocational testing. A total of 114 hospitals responded. Of a total of 4112 recovered patients discharged, 1%-2% of those leaving had been given aid in finding jobs. About 1/2 the hospitals reporting gave some kind of vocational education to patients; the median number of patients receiving such aid was 15, although a few served as many as 400 or more with such educational services. 1/2 of the hospitals offered new rehabilitation services with state rehabilitation counselors working 1-5 days a week in the hospital.—*M. A. Seidenfeld*.

3690. **Evans, Anne S., & Bullard, Dexter M.** (Massachusetts Mental Health Center, Boston) **The family as a potential resource in the rehabilitation of the chronic schizophrenic patient.** *Ment. Hyg., N.Y.*, 1960, 44, 64-73.—A group of 24 inpatients of the Metropolitan State Hospital, Waltham, Massachusetts, who had been hospitalized for a continuing period of not less than 5 years with a diagnosis of schizophrenia and who were undergoing drug and social therapies were studied along with their families to establish the role which the family plays in the rehabilitation and discharge of the patient. The role of the family is complex. Financial insecurity, available living space, willingness and capacity to support an additional family member, and

other socioeconomic and sociopsychological factors intervene and prevent whole-hearted cooperation even when the family maintains its interest in the patient. This emphasizes the need for careful and adequate utilization of the psychiatric social worker as well as community resources.—*M. A. Seidenfeld*.

3691. **Freeman, Howard E., & Kassebaum, Gene G.** (Harvard School Public Health, Boston, Mass.) **Relationship of education and knowledge to opinions about mental illness.** *Ment. Hyg., N.Y.*, 1960, 44, 43-47.—In this paper the investigators present data from a survey of the public's conception of mental illness conducted in 1950 by the Washington Public Opinion Laboratory. Zero-order correlations and factor analysis revealed strong evidence that opinions regarding mental illness and its cause and prevention had little or no relationship to the technical vocabulary of psychiatry which the respondents revealed and even less relationship to the amount of formal education which the respondents had attained. It is concluded that we must carefully reconsider whether or not educational efforts that are made to alter opinions regarding mental illness are likely to prove fruitful.—*M. A. Seidenfeld*.

3692. **Group for the Advancement of Psychiatry.** **Preventive psychiatry in the armed forces: With some implications for civilian use.** *GAP Rep.*, 1960, No. 47, 269-309.—Programs of preventive psychiatry in the military services are reviewed in terms of principles, effectiveness, and possible applications to civilian settings. The primary goal of such programs is the prevention of psychiatric disorders in individuals and groups of individuals. A related objective is to contribute to behavioral effectiveness of individuals in carrying out their work assignments and duties. (46 ref.)—*D. G. Brown*.

3693. **Hadley, John M.** (Purdue U.) **Work as therapy.** *Amer. Arch. rehabilit. Ther.*, 1960, 8(1), 11-16.—The thesis is presented that "work is a therapy of choice for many hospital patients. Rehabilitation . . . must never neglect the area of employment."—*L. Shatin*.

3694. **Howard, Bede F.** (352 Mt. Prospect Ave., Newark, N.J.) **An optimistic report on total rehabilitative potential of chronic schizophrenics.** *Arch. gen. Psychiat.*, 1960, 3, 345-356.—A "one year follow-up of patients staffed and released from July 1, 1957, to June 30, 1958." Reduction in weekend and town passes, "psychosocial milieu therapy" through a team approach by the entire staff, group psychotherapy and ataractic therapy—all combined resulted in a large increase of full-time and part-time employment of released patients who had been hospitalized between 10 and 15 years. Patients ill less than 2 years had the highest return and lowest employment rate. (54 ref.)—*L. W. Brandt*.

3695. **Hubbs, Roy S.** (VA Hosp., Palo Alto, Calif.) **Rehabilitation means restoration: The sheltered workshop.** *Ment. Hosp.*, 1960, 11(4), 7-9.—A preliminary report of a study of a sheltered workshop for patients well enough to leave the hospital but "too incapacitated to secure or hold gainful employment outside the hospital." 36 eligible patients were randomly assigned to either the treat-

ment or control condition and have been followed for from 1 month to 2 years.—*L. Gurel.*

3696. **Kramer, M., & Daniels, R. S.** A group psychotherapeutic rehabilitation program for chronic psychotics. *Psychiat. Quart. Suppl.*, 1959, 33, 119-127.—Initial observations of 6 male schizophrenics, all ill at least 10 yr. and none desired for individual therapy, placed in a group with organized activity for resocialization and combating of isolation and withdrawal. All 6 showed improvement in social relatedness in 18 mo. and 1 has been discharged and is employed. In addition to its therapeutic value, the program was an excellent training experience for psychiatric personnel involved.—*D. Prager.*

3697. **Krapf, E. E.** L'activité de l'Organisation mondiale de la Santé dans le domaine de la santé mentale. [The activity of the World Health Organization in the area of mental health.] *Hyg. ment.*, 1960, 49, 215-232.—The conclusions of the Second International Congress of Psychiatry study groups on schizophrenia, use of atomic energy in mental illness, ataraxics, and automation are reported. Other efforts for combined study of mental health problems are described and publications listed. 2 points are stressed: (a) psychiatrists need the assistance of other disciplines to solve mental health problems and (b) cultural and social differences characteristic of diverse regions must be taken into account.—*W. W. Meissner.*

3698. **Kris, E. B.** Intensive short-term treatment in a day care facility for the prevention of rehospitalization of patients in the community showing recurrence of psychotic symptoms. *Psychiat. Quart.*, 1960, 34, 83-88.—Thus far the results show there is value in such a temporary treatment facility in that it can control acute psychotic relapse within a very limited period and outside the hospital setting. The study is now being continued on a larger scale for a 3-year period.—*D. Prager.*

3699. **Lamarche, André.** Rapport de la commission sur l'hygiène mentale du milieu rural. [Report of the commission on rural mental health.] *Hyg. ment.*, 1960, 49, 52-74.—Report to the French League of Mental Health on the status of mental hygiene in farm areas of France. Psychological characteristics of farmers are discussed. The rural crisis is created by the movement to the city, especially on the part of the young, and abandonment of the land. The rapid social evolution without any preparation has undesirable psychological effects.—*W. W. Meissner.*

3700. **Novis, F. W., Marra, J. L., & Zadrozny, L. J.** (Connecticut State Dept. Education) Quantitative measurement in the initial screening of rehabilitation potential. *Personnel guid. J.*, 1960, 39, 262-269.—A quantitative approach is suggested for the isolation and identification of basic case data factors which contribute to rehabilitation potential. The experimentally developed scale has been found useful in screening cases which warrant assistance.—*S. Kavruck.*

3701. **Roth, Martin.** (King's Coll. Medical School, Newcastle upon Tyne, England) Mental health problems of the aging and the aged. *Bull. WHO*, 1959, 21, 527-561.—"Social factors are im-

portant . . . as well as the frequency of suicide, which reaches a peak among the aged in most countries. All communities possess valuable assets in the form of existing links between the aged and their families which may be lost by indiscriminate community planning. Although some psychological decline is inevitable during senescence, it is becoming clear that much that once passed for the ineluctable effects of mental and physical aging is due to disease that may be ameliorated or cured."—*J. C. Franklin.*

3702. **Sivadon, P.** L'action pour la santé mentale dans le monde. [World action for mental health.] *Hyg. ment.*, 1960, 49, 16-33.—A report to the French League of Mental Health on recent programs in various parts of the world for the preservation and promotion of mental health. Activities of the World Federation for Mental Health are included.—*W. W. Meissner.*

3703. **Wales, Byron G.** (East Providence, R.I.) Rewards of illness: Observations on institutionalization by a former neuropsychiatric patient. *Ment. Hyg.*, NY, 1960, 44, 55-63.—Dependency developing out of long-term institutionalization is seen as the source of serious problems to the patient. This is complicated by the long separation of the patient from normalizing experiences in meeting the impact of social mores and customs and of adjustment to his community, his family and friends. There is an extra burden on the patient to once again learn these relationships.—*M. A. Seidenfeld.*

3704. **Wright, Fred H.** (VA Hosp., Gulfport, Miss.) Rehabilitation in twenty-five European NP hospitals. *J. counsel. Psychol.*, 1959, 6, 275-279.—Hospitals in Europe were surveyed for factors pertinent to rehabilitation. Psychiatric patients are given more freedom and responsibility than in United States hospitals, resulting in more competent and instructive activity. More research in milieu treatment programs should be undertaken in this country.—*M. M. Reece.*

(See also Abstracts 2943, 2951, 2954, 3576, 4003)

## ABNORMAL PSYCHOLOGY

3705. **Albert, Robert S.** (Massachusetts Mental Health Center, Boston) Stages of breakdown in the relationships and dynamics between the mental patient and his family. *Arch. gen. Psychiat.*, 1960, 3, 682-690.—Family members have different and interdependent roles. According to the model presented these roles change when one family member becomes ill. Illness spreads over the family and intensifies with the restitution attempts. Many variables decide who becomes the patient. The family moves from awareness of changes in interaction and of conflicts via feelings of helplessness, increased aggressiveness, and withdrawal attempts to the eventual removal of the patient. The model may be used for observation and prediction. 3 stages of breakdown and several subdivisions are discussed concerning the behavior, affects, and cognition of the family members. (29 ref.)—*L. W. Brandt.*

3706. **Bernal del Riesgo, Alfonso.** (U. Havana, Cuba) Psicología y enfermedad. [Abnormal psy-

chology.] Havana, Cuba: Univer. Havana Press, 1959. x, 226 p.—A text on abnormal psychology divided into 4 parts: "Psychopathology," "Psychodiagnostics," "Psychotherapy," and "Psychiatry."—C. T. Morgan.

3707. Brody, Eugene B. Borderline state, character disorder, and psychotic manifestations: Some conceptual formulations. *Psychiatry*, 1960, 23, 75-80.—"Borderline" patients are defined in terms of: chronicity and ego-syntonicity of their symptoms, their tendency to exhibit psychotic manifestations in the transference, and the atmosphere of their early development. Several interrelated hypotheses are proposed and supported with clinical illustrations.—C. T. Bever.

3708. Bucklew, John. (Lawrence Coll.) **Paradigms for psychopathology: A contribution to case history analysis.** Chicago, Ill.: Lippincott, 1960. xii, 236 p. \$5.00.—The application of a limited number of concepts to the analysis of case history material is facilitated by the development of diagram elements whereby each case may be analyzed visually as well as verbally. Diagrammatic analysis is presented for such disorders as obsession-compulsion, inadequate personality, psychopathic and deviant personalities, and psychotic reactions. A chapter is devoted to the concept of abnormality and value systems.—L. N. Solomon.

3709. Ey, Henri; Bernard, P., & Brisset, C. **Manuel de psychiatrie.** [Manual of psychiatry.] Paris, France: Masson & Cie, 1960. 1013 p. NF 100.—This textbook is eclectic, combining traditional continental neuropsychiatry with analytical views. It differs from standard American texts in the large space that is given to the organic brain syndrome (242 pages), while the chapters on pathogenic action of the milieu (24 pages) and psychosomatic pathology (19 pages) are relatively brief. A number of diagnostic classifications and treatment methods are described which are considered obsolete in America. The same can be said about the references, where less emphasis is given to recent trends of research than to an unusually complete survey of historical developments.—R. Kaelbling.

3710. Kaplan, David M., & Mason, Edward A. **Maternal reaction to premature birth viewed as an acute emotional disorder.** *Amer. J. Orthopsychiat.*, 1960, 30, 539-552.—Believing that the occurrence of an acute disorder does not depend on the prior existence of an established chronic process, the authors describe normal and pathological reactions to the birth of a premature infant. In cases where the mother makes a good psychological adjustment, it seems that she must go through 4 stages; anticipatory grief, acknowledgment of failure, resumption of active relating to the baby, seeing the premature baby's special needs and viewing prematurity as a temporary state. In cases where denial is used as a defense or where the mother fails to respond to the infant's progress, there is often poor outcome of the stress situation. In the discussion Helen Wortis suggests that the typical mother of the premature may be subject to stress even before the birth of her baby, the premature delivery itself may be the result of stress, the mothers' responses to the delivery may be in keeping

with their total life experience and character development.—R. E. Perl.

3711. McCulloch, Donald J., & Stewart, Joan C. (U. Toronto, Canada) **Sexual norms in a psychiatric population.** *J. nerv. ment. Dis.*, 1960, 131, 70-73.—"Distorted or unusual attitudes to the sexual function have been implicated by psychoanalytic theorists in the etiology of the bulk of the psychiatric syndromes. To test this hypothesis, the writers assumed that these attitudes would be reflected in premarital and extra-marital patterns of sexual behavior. Accordingly, information was collected on these patterns on a sample of more than two hundred psychiatric patients and compared with the information available on a nonpsychiatric population. The study gives some support to the hypothesis."—N. H. Pronko.

3712. McKell, Charles R. **The problem of mental illness in Utah.** *Provo Pap.*, 1957, 1(4), 1-14.—The author attempts to show the amount of mental illness in Utah that has been "officially recognized and hospitalization sanctioned or demanded and provided." Some opinions are expressed concerning the expected incidence of mental illness. Rate of hospitalization in Utah was compared with rates in other states.—W. F. Hill.

3713. McMurtry, Robert N. (McMurtry Co., Chicago, Ill.) **Mental illness: Industry's 3 million dollar burden.** *Adv. Mgmt.*, 1960, 25(9), 18-20.—There are certain realities which top management must face from a mental hygiene point of view. (a)  $\frac{1}{6}$  of all employees are or will be victims of mental disorder. (b) It will be difficult to tell these people they are ill. (c) These individuals will not change without outside aid. (d) Logic and reason will not bring about a change in behavior. (e) Very few persons have insight into their own makeup. (f) There is no necessary relationship between intelligence and judgment. (g) Management, not understanding the employees needs can place him in the wrong job and exaggerate a mild anxiety. (h) Management makes its most serious mistakes in promoting people over their heads. "It is management's responsibility to conduct a [mental] hygiene operation. The individual employee cannot do it; the union cannot do it; it must be done by management itself."—E. Q. Miller.

3714. Nickling, G., & Toolan, J. M. **20-year follow-up of an adolescent service in a psychiatric hospital.** *Psychiat. Quart. Suppl.*, 1959, 33, 301-316.—319 adolescent males admitted in 1957 were compared with 328 female adolescent admissions in 1953 and 496 adolescent male admissions in 1937 when the service first opened. There is a marked increase in the incidence of schizophrenia as well as in the number of referrals to state hospitals. From 1937 to 1957 there was an increase in permissiveness with increased flexibility culminating in the open door policy and extended visiting hours. There is decreased violence with use of psychopharmacology. Special factors and problems affecting the adolescent are briefly discussed.—D. Prager.

3715. Stengel, E. (U. Sheffield, England) **Classification of mental disorders.** *Bull. WHO*, 1959, 21, 601-663.—"One of the fundamental difficulties in devising a classification . . . is lack of agree-

ment . . . regarding the concepts upon which it should be based: diagnoses can rarely be verified objectively and the same or similar conditions are described under a confusing variety of names." The author examines many existing classifications and "shows how . . . lack of knowledge regarding pathology and etiology may be overcome by the use of 'operational definitions' and outlines the basic principles on which he believes a generally acceptable international classification might be constructed."—*J. C. Franklin.*

(See also Abstracts 3288, 3487)

#### PHYSICAL HANDICAPS

3716. Bloomer, H. Harlan. (U. Michigan) **Rehabilitation of the adult with speech and hearing problems.** *ASHA*, 1960, 2, 431-434.—Training of clinicians to work with adults imposes additional and special requirements on those which are basic to the training of clinicians in general. Textbooks and resource materials do not reflect this awareness. The main differences relate to the types, etiologies, personal and social affects of the disorders; the significantly different approaches in techniques; significantly different programs in training; and need to be carefully thought of in clinical and training programs.—*M. F. Palmer.*

3717. Frisina, D. Robert. (Gallaudet Coll., Washington, D.C.) **Some problems confronting children with deafness.** *Except. Child.*, 1959, 26, 94-97.—A scholarly discussion of the limitations of the deaf child in the acquisition and manipulation of language skills with particular emphasis upon the difficulty of acquiring language symbols through exclusively visual means as the deaf child is forced to do.—*A. Barclay.*

3718. Hollinshead, Merrill T. (Newark Public Schools, N.J.) **The social psychology of exceptional children: I. The characteristics of exceptional children.** *Except. Child.*, 1959, 26, 137-140.—Considerations and discussion of a point of view that essentially nonsocial physical limitations are as important as social factors in the psychological economy of handicapped children.—*A. Barclay.*

3719. Hutton, Charles. (VA Regional Office, Atlanta, Ga.) **A diagnostic approach to combined techniques in aural rehabilitation.** *J. speech hear. Dis.*, 1960, 25, 267-272.—18 Ss were used in testing a pedagogical procedure consisting of 9 steps useful in teaching phoneme recognition to persons with hearing disorders. Application of these procedures indicated that those who showed the most gain for combined stimuli also showed substantial gains in auditory and visual discrimination. On the other hand, those who made the largest amount of gain in auditory scores tended to make little gain in visual discrimination. Clients under the age of 50 are more likely to benefit from combined phonemic training than those above age 50.—*M. F. Palmer.*

3720. Jeffers, Janet. (Los Angeles State Coll.) **Quality judgment in hearing aid selection.** *J. speech hear. Dis.*, 1960, 25, 259-266.—32 Ss with conductive-type losses were asked to judge the quality of speech reproduced by 5 different vacuum-type hearing aids ranged in pairs for comparison and chosen as typical of differences in acoustic characteristics found in wearable hearing aids. The typical

acoustic differences were sufficient to result in real differences in the quality of reproduced speech, and the Ss were excellent judges of these differences.—*M. F. Palmer.*

3721. Kodman, F., Jr., Sedlacek, G., Whipple, C., & Lawson, C. **Psychosocial characteristics of adults with functional hearing losses.** *Percept. mot. Skills*, 1960, 11, 23-27.—"A sample of 100 cases with functional hearing losses were compared with a control group of 96 hard of hearing cases. The two samples were equated for sex, chronological age, and degree of hearing loss. The samples were compared on the basis of mean income, duration of military service, number referred for psychiatric examination, occupational status, type of loss (monaural or binaural), and number of psychosomatic complaints."—*C. H. Ammons.*

3722. Kodman, Frank, Jr., Spies, Carl; Stockdell, Kenneth, & Sedlacek, Gordon. (U. Kentucky) **Socio-economic status and observer identification of hearing loss in school children.** *Except. Child.*, 1959, 26, 176-179.—"This study was concerned with socio-economic status as a variable in parent identification of hearing loss children. . . . Parent identification, teacher identification and audiometric identification were compared on 716 elementary school children in grades two through six. . . . Parents . . . and the classroom teacher were significantly inferior to puretone audiometry. . . . Socio-economic status was not found to be a significant variable. . . . Puretone audiometry was recommended annually for all school children as the primary method for evaluating auditory acuity."—*A. Barclay.*

3723. Leshin, George J. (Oregon State Board Health, Salem) **Childhood nonorganic hearing loss.** *J. speech hear. Dis.*, 1960, 25, 290-292.—In the Oregon Hearing Conservation Program, 48 cases of suspected nonorganic hearing loss were discovered among 1902 children seen at otological clinics. The combined otological, audiological, medical, and social consultants and local health departments worked together to reconcile the data to attempt to arrive at a true level of hearing and to determine familial and environmental factors contributing to the loss. There is a need for the whole area of nonorganic hearing problems in children to be explored further.—*M. F. Palmer.*

3724. Myklebust, Helmer R. (Northwestern U.) **The psychology of deafness: Sensory deprivation, learning, and adjustment.** New York: Grune & Stratton, 1960. xii, 393 p. \$7.75.—Intended as "a textbook for advanced courses in Audiology, Language Pathology, Special Education and Psychology." 14 chapters arranged in 4 parts: I. the nature and extent of deafness: the problem, the process of hearing, types and causes of deafness, sensory deprivation and behavior; II. deafness and psychological processes: deafness and mental development, personality development and emotional adjustment, deafness and motor functioning, deafness and social maturity; III. language-speech, speechreading, reading and writing: language and language development, speechreading and speech, read and written language; IV. other handicaps, special abilities, and aptitudes: seeing and hearing, other handicaps, and interest patterns, aptitudes, and special abilities. Appendices: statistical



formulae, and differences found on each of the items on the Projective Personality Test.—C. T. Morgan.

3725. Norton, Max C., & Lux, Elizabeth. (Modesto City Schools, Calif.) Double frequency auditory screening in public schools. *J. speech hear. Dis.*, 1960, 25, 293-299.—Due to a demand for rapid and reliable pass-fail type auditory screening methods, a sampling of 10,046 Ss was taken from 4 schools which represented a cross section of the socioeconomic structure of the community. The double frequency method appeared to be less reliable than the 5-frequency method, although it is simpler and considerably faster to administer. It was less distracting for young children, and less advance preparation was needed. The long-range implications of using double frequency audiometry cannot be ascertained from this study.—M. F. Palmer.

3726. Paramonova, N. P. (Inst. Defectology, Moscow, USSR) Sensibiliziruyushche deistvie preryvistogo zvukovogo razdrazhitelya u glukhonemykh i tugoukhykh detei. [The sensitizing action of an intermittent auditory stimulus in deaf-mute children and in children with impaired hearing.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, No. 6, 119-124.—To what extent and how is it possible to raise the sensitivity of an impaired auditory analyzer? In this study using conditioning techniques with children who were deaf-mute and hard of hearing, it was found that the auditory sensitivity can be raised by as many as 10 db. when a subliminal intermittent auditory stimulus was presented to the Ss.—A. Cuk.

3727. Steer, M. D., & Hanley, T. D. (Purdue U.) Clinic-laboratory design based on function and philosophy at Purdue University. *ASHA*, 1960, 2, 439-443.—Description of the design of the new clinic and laboratory at the Purdue University Speech and Hearing Clinic. Advantage was taken of 25 years previous experience for developing programs for clinical work as well as good instrumentation for research. Student staff members in speech pathology and audiology at Purdue are encouraged to base clinical practice on research findings; to base clinical research on newly-discovered scientific facts and principles; and always use the best instrument available for the task at hand, but never to establish dependency on instrumentation so that clinical efficiency is in any way impaired.—M. F. Palmer.

3728. Wallace, Helen M. (United States Dept. Health, Education, Welfare, Children's Bureau, Washington, D.C.) Urban school services for children with hearing loss. *J. speech hear. Dis.*, 1960, 25, 281-289.—106 cities of the United States with a population of 100,000 or over were sent a questionnaire regarding the school services currently being provided for children with hearing loss. There was a considerable variation in the services to the deaf as well as the hard of hearing, and suggestions are made for further strengthening of such services.—M. F. Palmer.

(See also Abstracts 3046, 3445, 3756, 3963, 4022, 4023, 4038, 4173)

#### NEUROLOGICAL DISORDERS

3729. Abercrombie, M. L. J. (Guy's Hosp., London, England) Perception and eye movements:

Some speculations on disorders in cerebral palsy. *Cerebral palsy Bull.*, 1960, 2, 142-148.—"The aim of this paper is to draw the attention of psychologists to the possible relevance of disordered eye movements to disordered perception in cerebral palsy, and to draw the attention of students of eye movements to the possible interest of cerebral palsy in providing natural experiments for the study of the effects of abnormalities of motor and sensory experience on the development of perceptual skills. It is hoped that if a causal relationship can be established, and if means can be found to treat the oculomotor disorders in early life, it may be possible to prevent the development of some of the disorders of perception." (36 ref., French & German summaries)—Author summary.

3730. Auerbach, Arthur H., Scheffen, Albert E., Reinhart, Raymond B., & Scholz, Carol K. (255 S. 17 St., Philadelphia 3, Pa.) The psychophysiological sequelae of head injuries. *Amer. J. Psychiat.*, 1960, 117, 499-505.—Follow-up interviews and examination of 48 patients with head injuries were made after a mean interval of 12 mon. It was found that "severity of injury was not related to post-traumatic symptoms." Relationships were found between pre-traumatic personality disturbance and posttraumatic symptoms. The sequelae are considered psychosomatic that "signify the sum of two quantities: 1. The damage to the brain and its surrounding structures; and 2. The patient's emotional reaction to this damage and to the experience of the trauma."—N. H. Pronko.

3731. Brusa, A., Rossi, R., & Tartarini, E. (U. Genoa, Italy) Syndrome primaire de Gerstmann dans un cas de méningiome frontal de la convexité. [Primary syndrome of Gerstmann in a case of frontal meningioma of the convexity.] *Encephale*, 1960, 49, 319-328.—A case of Gerstmann's primary syndrome is described involving the typical symptoms of "digital agnosia," right-left disorientation, agraphia and inability to calculate. The lesion is usually localized in the left parietal lobe, specifically in the gyrus angularis and the zone of transition to the second occipital convolution. Symptomatology was relieved by removal of the tumor which in this case was localized in the dura mater of the convexity of the left frontal lobe. The appearance of the symptoms is explained by a double mechanism involving compression at a distance and a vascular factor. The symptoms seem to be interconnected.—W. W. Meissner.

3732. Burns, R. C. (Children's Orthopedic Hosp., Seattle, Wash.) Behavioral differences between brain-injured and brain-deficit children grouped according to neuropathological types. *Amer. J. ment. Defic.*, 1960, 65, 326-334.—"Using objective neuropathological criteria two groups of children matched for age were selected from 1400 consecutive cases referred to psychology in a children's hospital. Group A consisted of children normal until age three, with subsequent CNS insult and tissue injury (T-I) as substantiated by neurological data. Group B consisted of children with known brain tissue underdevelopment or maldevelopment (T-U-M). Consistent differences as measured by Wechsler Intelligence Scale for Children subtest scores, both group and individually, were obtained. The T-I group was

characterized by a Kohs' below Object Assembly (b.d. below o.a.) pattern. The T-U-M group was characterized by a b.d.-above o.a., lower similarities, arithmetic, and picture completion scores, and a suggestion of slower EEG frequencies indicating "electrical immaturity of the brain." It is suggested that combined neurological, biochemical and psychological indices of brain dysfunctioning may improve our diagnostic, prognostic and possibly etiologic knowledge of brain underdevelopment, maldevelopment or injury."—*Author summary.*

3733. Dunn, Lloyd M., & Harley, Randall K. (George Peabody Coll. Teachers) **Comparability of Peabody, Ammons, Van Alstyne, and Columbia test scores with cerebral palsied children.** *Except. Child.*, 1959, 26, 70-74.—"The present study was undertaken to explore the comparability with cerebral palsied children of three new or revised individual tests of intelligence and one well-established test. . . . These scales were administered to twenty children with various types and degrees of cerebral palsy. Teacher rankings of reading and arithmetic achievement were also obtained on each subject. . . . The results of this study indicate that all four tests can be used successfully with cerebral palsied children in predicting school success."—*A. Barclay.*

3734. Greenbaum, M., & Buehler, J. A. (U. Oregon, Medical School) **Further findings on the intelligence of children with cerebral palsy.** *Amer. J. ment. Defic.*, 1960, 65, 261-264.—"Forty per cent of the [220 cerebral palsy] children were below IQ 70 in the present study. This is one of the lower figures of those reported for several recent large scale studies where the percentage has been between 48 and 55 per cent. The results still point to the importance of recognizing the preponderance of multiple handicaps among these children. Of additional importance for educators is the demonstration that a smaller percentage of the intellectually superior occurs in samples of cerebral palsy children than in groups of unselected youngsters."—*Author summary.*

3735. Haring, Norris G. (U. Maryland) **A review of research on cerebral palsy and emotional adjustment.** *Except. Child.*, 1959, 26, 191-194.—"It is felt that cerebral palsy per se has less influence on emotional adjustment than do the parental and peer group attitudes to which the cerebral palsied child is exposed. It is recommended that parents and others examine their own emotional attitudes and accept the child as he is without imposing additional pressures engendered by their idea of what normative patterns he should conform with in his attempts to adjust to his environment. (17 ref.)"—*A. Barclay.*

3736. McFie, John. (National Hosp., Queen Square, London, W.C.1, England) **Psychological testing in clinical neurology.** *J. nerv. ment. Dis.*, 1960, 131, 383-393.—"Analysis of psychological test data obtained from 215 unselected patients with localized cerebral lesion, and from 51 who furnished pneumoencephalographic data, showed that certain intellectual abilities are selectively impaired. The implications of these findings suggest that psychological tests will be of more use to the neurologist if they identify syndromes or patterns of impairment rather than indicating presence or absence of brain damage."—*N. H. Pronko.*

3737. Magri, R. **Considerazioni su taluni disturbi psichici da lesione occipitale.** [Considerations about psychological disturbances in occipital lesions.] *Arch. Psicol. Neurol. Psichiat.*, 1960, 21, 394-421.—"Memory and superior mental functions are most affected by occipital lesions. Factors that concur in the determination of the damage are: focal deficiency, destruction of cortex, new adaptations of behavior, loss of spatial orientation, and loss of mental imagery."—*L. L'Abate.*

3738. Money, John. (Johns Hopkins U.) **Phantom orgasm in the dreams of paraplegic men and women.** *Arch. gen. Psychiat.*, 1960, 3, 373-382.—"7 paraplegic and quadriplegic women and 14 men were interviewed with tape-recordings. 2 cases are reported. 2 tables list age, duration, and site of injury; menses, erection, and ejaculation, respectively; sex before and after injury; breast eroticism in the women; sexy daydreams, sleep dreams, and locomotion dreams (sleeping). Erection and ejaculation may occur in paraplegics only reflexly and without erotic feelings. The latter may occur with kissing and fondling of breasts. Some patients reported intercourse and orgasm imagery in their dreams after injury. Sexual desire no longer existed. Some attempted intercourse in the hope of regaining the former experience or for the gratification of satisfying the partner. Sexy daydreams were frequent."—*L. W. Brandt.*

3739. Reitan, R. M. (Indiana U. Medical Center) **The comparative effects of brain damage on the Halstead Impairment Index and the Wechsler-Bellevue Scale.** *J. clin. Psychol.*, 1959, 15, 281-285.—"50 Ss diagnosed as with brain damage, and 50 non-brain-damaged Ss. Analyses indicate the Impairment Index to be more sensitive to brain damage than any of the Wechsler-Bellevue variables selected for comparison."—*F. N. Arnhoff.*

3740. Shankweiler, D. P. (State U. Iowa) **Performance of brain-damaged patients on two tests of sound localization.** *Dissertation Abstr.*, 1960, 21, 1633.—Abstract.

3741. Stepień, Lucjan, & Sierpiński, Stanisław. (Polish Acad. Sciences, Warsaw, Poland) **The effect of focal lesions of the brain upon auditory and visual recent memory in man.** *J. Neurol. Neurosurg. Psychiat.*, 1960, 23, 334-340.—"Auditory and visual recent memory was examined in 50 patients with unilateral focal lesions of the brain using a new test for recent memory proposed by Konorski (1959). Unilateral lesions situated in the temporal, parietal, or frontal lobe, quite independent of the side (dominant and subordinate hemisphere), cause no impairment of auditory or visual recent memory. An interesting case is presented in which a deficit for recent memory produced by a lesion in the right hippocampal zone giving afterdischarges in both temporal lobes cleared completely after the radical removal of an epileptogenic focus in the right fronto-temporal region. This is a confirmation of Penfield's theory that the hippocampal complex plays an important role in the normal processes of memory retention in man." (3 fig., 5 tables, 18 ref.)—*Author summary.*

3742. Thurston, J. R. (Wisconsin State Coll., Eau Claire, Wis.) **Attitudes and emotional reac-**

tions of parents of institutionalized cerebral palsied, retarded patients. *Amer. J. ment. Defic.*, 1960, 65, 227-235.—As a group, the parents appeared as hostile, suspicious, depressed, and generally uneasy. While these responses were, technically, their remembered attitudes and reactions prior to the child's institutionalization, their general tenor was interpreted as reflecting current parental maladjustment and unrest. There would appear to be need for more effective parental counseling.—V. M. Staudt.

3743. Unger, Thomas, & Imboden, John B. (Johns Hopkins U. School Medicine) **Binocular resolution: The stereoscopic responses of pre- and post-operative rhinoplasty subjects to paired rhinoplasty patients.** *J. nerv. ment. Dis.*, 1960, 131, 414-417.—"A comparison has been presented of the results of two groups of rhinoplasty patients and a group of control subjects looking at visual stimuli in a stereoscope. A statistically significant difference was found between the control and the post-operative groups with regard to a type of response pattern termed "randomized." A hypothesis is presented explaining this difference on the basis of anxiety aroused by the stimuli in the emotionally labile patient which becomes manifest as a reluctance to make definite judgments, resulting in "randomized" responses.—N. H. Pronko.

3744. Wedell, K. (Child Guidance Clinic, Bristol, England) **Variations in perceptual ability among types of cerebral palsy.** *Cerebral palsy Bull.*, 1960, 2, 149-157.—"In a comparison of groups of cerebral palsied children, matched for age and intelligence, it was found that a larger number of cerebral palsied children showed low perceptual ability, which, in a few cases, was below that of any of the non-cerebral palsied children. Within the cerebral palsied group, perceptual impairment was found to be associated with spasticity rather than athetosis, and with bilateral and left-sided spasticity rather than right-sided. This indicated that perceptual impairment might be related to right-sided brain injury. Motor and visual handicap appeared to have a contributory rather than a determining effect." (French & German summaries)—C. T. Morgan.

3745. Wendland, John P., & Nerenberg, Sidney. (U. Minnesota Medical School) **Visual field studies after temporal lobectomy for epilepsy.** *Arch. Ophthalmol.*, Chicago, 1960, 195-200.—Following a varying, but measured, amount of excision of the temporal lobes of 24 idiopathic epileptics, visual fields were performed. Field defects resulting from amputations were congruous, indicating that fibers from corresponding retinal points lie close together in the interior portion of the radiations. Other conclusions are that Meyer's loop does exist, that fibers serving upper quadrants extend most anteriorly, and that the sweeping forward of the upper visual field fibers results in an anatomic interval between them and lower quadrant fibers.—R. Sulzer.

(See also Abstracts 2867, 3384, 3410, 3415, 3482, 3484, 3493, 3753, 3787)

#### SPEECH DISORDERS

3746. Adler, Sol. (East Tennessee State Coll.) **Some techniques for treating the hypernasal voice.** *J. speech hear. Dis.*, 1960, 25, 300-302.—Review of

techniques for treating the hypernasal voice.—M. F. Palmer.

3747. Bloodstein, Oliver. (Brooklyn Coll.) **The development of stuttering: I. Changes in nine basic features.** *J. speech hear. Dis.*, 1960, 25, 219-237.—336 males and 82 females (ranging in age from 2 to 16 years) who had been diagnosed as stutters at the Brooklyn College Speech and Hearing Center were studied relative to repetitions, hard contacts, associated symptoms, etc. Relatively simple repetition, hard contacts, and pressure symptoms dominate early stuttering. The tendency to repeat whole words disappears as stutters grow older. 4 stages of development of associated symptoms may be outlined: (a) little overt reactions; (b) self-concept as a stutterer with no emotional reactions; (c) annoyance, frustration, disgust, or anger; (d) fear and embarrassment.—M. F. Palmer.

3748. Bloodstein, Oliver. (Brooklyn Coll.) **The development of stuttering: II. Development phases.** *J. speech hear. Dis.*, 1960, 25, 366-376.—The case records of 418 stutters from age 2 to 16 were examined from the point of view of the temporal relationship in which various features of stuttering emerge. 4 generalized phases were found: (a) episodic difficulty, occurrence on initial word of sentence, occurrence on small parts of speech, repetition, intensification by variable sources of pressure; (b) stuttering primarily when individual says he talks fast and gets excited, on major parts of speech, and with reaction of the case that he is a stutterer; (c) more difficulty in some situations, word substitutions, etc., and with mild emotional reactions; (d) vivid anticipation, special difficulties in response to various sounds, listeners, etc., frequent word substitution, avoidance of speaking situations and other evidences of fear and embarrassment.—M. F. Palmer.

3749. Borel-Maisonny, Suzanne. (J.-J. Rousseau Inst., Geneva, Switzerland) **Language oral et écrit: II. Epreuves sensorielles et tests de langage.** [Spoken and written language: II. Sensory and language tests.] Neuchâtel, Switzerland: Delachaux & Niestlé, 1960. 196 p. SFr. 15.—Description of a series of tests for children with speech disorders. Years 1½-5: comprehension and utilization of language, nonverbal tests for measuring intelligence level. Years 5-10: Nonlinguistic tests involving motor, visual, auditory, judgment and orientation factors; linguistic tests consisting of comprehension and utilization of language and sensory aptitudes and their symbolic expression. Instructions for administration and scoring are given. Tests were not standardized. Approximate CA level of performance is given.—A. Doman.

3750. Dow, Clyde W. (Ed.) (Michigan State U.) **Abstracts of theses in the field of speech. Part XV. Speech Monogr.**, 1960, 27, 239-258.—Selected abstracts of doctoral dissertations accepted at various universities during the calendar year 1959, covering the general field of speech and hearing disorders.—M. F. Palmer.

3751. Eastman, D. F. (U. Nebraska) **An exploratory investigation of the psychoanalytic theory of stuttering by means of the Blacky Pictures Test.** *Dissertation Abstr.*, 1960, 21, 1629.—Abstract.



3752. Emerick, Lonnie L. (Michigan State U.) **Social distance scale for stutterers.** *J. speech hear. Dis.*, 1960, 25, 408-409.—A tentative scale for social distance in stuttering is presented.—M. F. Palmer.

3753. Farmakides, Mary N., & Boone, Daniel R. (Highland View Cuyahoga County Hosp., Cleveland, O.) **Speech problems of patients with multiple sclerosis.** *J. speech hear. Dis.*, 1960, 25, 385-390.—82 patients with multiple sclerosis having a mean age of 40.6 with a standard deviation of 10.3 were examined for their speech characteristics, the most frequent being dysarthria, with scanning speech, excessive nasality, weak phonation, impaired respiration, faulty pitch, reduced rate, and emotional lability. Of 68 of the 82 patients receiving speech re-education, 58 demonstrated improvement in speech. Particular gains were experienced in rate of speech and louder phonation.—M. F. Palmer.

3754. Fletcher, Samuel G., Haskins, Richard C., & Bosma, James F. (U. Oregon Medical School) **A movable bulb appliance to assist in palatopharyngeal closure.** *J. speech hear. Dis.*, 1960, 25, 249-258.—A movable bulb prosthetic appliance was designed to assist hypernasal-voiced Ss in achieving total pharyngeal closure and was utilized experimentally in 5 Ss. Significant improvement in speech was immediately apparent. Radiographic comparisons showed that with the appliance in place, ventrad movement of the upper pharyngeal wall occurred in 3 of 5 Ss. Without the appliance, no movement occurred except in swallowing.—M. F. Palmer.

3755. Goda, S. (Johnstone Training and Research Center, Bordentown, N.J.) **Vocal utterances of young moderately and severely retarded non-speaking children.** *Amer. J. ment. Defic.*, 1960, 65, 269-273.—The sound responses of eight non-speaking, young, moderately and severely retarded children reveal 5 levels of speech development. Implications for speech training and the prognosis for the development of speech are based on these observations.—V. M. Staudt.

3756. Horlick, Reuben S., & Miller, Maurice H. (Dept. Correction, Washington, D.C.) **A comparative personality study of a group of stutterers and hard of hearing patients.** *J. gen. Psychol.*, 1960, 63, 259-266.—The California Test of Personality was administered to 26 students and 26 hard of hearing patients and a control group. The stutterers, as a group, tend to manifest more nervous symptoms and appear to be suffering from greater tensions, feelings of inferiority, insecurity, and withdrawal tendencies; but the differences are not significant. The personality picture of the hard of hearing person is more like that of the normal Ss. Wide variations in intra-group performances were noted. No one characteristic pattern of adjustment for either the stutterers or hard of hearing patient could be identified. Individual patterns cannot be predicted but must be evaluated on an individual basis.—Author abstract.

3757. Katz, L. (VA Outpatient Clinic, Brooklyn, NY) **Learning in aphasic patients.** *J. consult. Psychol.*, 1958, 22, 143-146.—"The study investigated the relative effectiveness of goal-directed and incidental learning in aphasic patients. Observations about the performance of aphasics made by different

workers were the source of the hypothesis which stated that in aphasic patients the normally more effective goal-directed learning situation is not significantly more effective than the incidental learning situations. In order to test this hypothesis, two equivalent series of postage stamps were exposed to 25 predominantly expressive male aphasic patients between the ages of 19 and 51, once with instructions to remember the stamps and once with instructions to evaluate the stamps aesthetically. Retention of the material was tested and the scores obtained by the aphasics were compared with those obtained by a control group of 25 male nonaphasics. Results confirmed the hypothesis."—Author summary.

3758. Keislar, Evan R. (U. California, Los Angeles) **The validity of the Thurstone Temperament Schedule with adolescents.** *Personnel guid. J.*, 1959, 38, 226-228.—Adolescents appear to reliably answer items on the TTS in a fashion consistent with the reputation they had with their peers; validity coefficients, in the .40s, are highly significant.—S. Kavruk.

3759. Moll, Kenneth L., & Darley, Frederic L. (U. Iowa) **Attitudes of mothers of articulatory-impaired and speech-retarded children.** *J. speech hear. Dis.*, 1960, 25, 377-384.—The Parental Attitude Research Instrument and Wiley's Attitudes Toward the Behavior of Children were administered to 3 groups of mothers of children 3 to 12 years of age: 26 mothers of children with functional articulatory problems, 30 mothers of children with delayed speech, 60 mothers of children with no speech problems. There were no significant differences on the ATBC scales and on only 3 of the PARI scales. Mothers of speech-retarded children seemed to offer the children less encouragement to talk. Mothers of articulatory-impaired children have higher standards and are more critical than are mothers of non-speech-impaired children. Clinical usefulness of the instruments appears limited.—M. F. Palmer.

3760. Palmer, Martin F. (U. Wichita) **Managing over-protective tendencies with speech-impaired children.** *J. speech hear. Dis.*, 1960, 25, 405-408.—Analysis of constructs of etiology of the over-protective tendency of parents of speech-impaired children, with suggestions for rehabilitation.—M. F. Palmer.

3761. Quarrington, Bruce, & Douglass, Ernest. (U. Toronto) **Audibility avoidance in nonvocalized stutterers.** *J. speech hear. Dis.*, 1960, 25, 358-365.—22 stutterers, 8 stuttering vocally and 14 non-vocally, were compared on 2 180-word passages, including all sound combinations in roughly equal frequency, first with the instruction to read as well as possible, and second so that Ss could, if they wished, block out the examiner's listening to the sound by the S feeding him white noise. Each S was questioned after his performances as to how he felt he had performed. A record of actual stuttering performance was obtained by a concealed tape recorder. The 2 experimental groups were then reversed and 4 additional stutterers were studied for adaptation, order of words, or other interactions in the sample. Individuals with nonvocal stuttering are characterized by stronger drives to avoid audibility of stuttering.—M. F. Palmer.



3762. Sheehan, Joseph G., Hadley, Robert G., & White, Gerald R. (U. California, Los Angeles) **The speech pathologist: His interests, activities and attitudes.** *J. speech hear. Dis.*, 1960, 25, 317-322.—93 Fellows of the American Speech and Hearing Association, consisting of 74 males and 19 females, were studied by means of the Strong Vocational Interest Blank and a specially-constructed questionnaire. Major activities for males were teaching and administration; for females, teaching and service. The Fellows are highly satisfied with the profession, are oriented more toward people than toward things, and value most the challenging and stimulating nature of the work. The only substantial complaint is too many administrative duties. The vocational interest pattern very closely resembles that of the psychologist.—M. F. Palmer.

3763. Soufi, Alladin. (U. California, Los Angeles) **A one-month stutterer.** *J. speech hear. Dis.*, 1960, 25, 411.—Case study of a case of a normal child meeting a relative who stuttered badly and stuttering for one month only until the parent suggested that the child did not have to talk that way just because his cousin did.—M. F. Palmer.

3764. Wepman, Joseph M., Jones, Lyle V., Bock, R. Darrell, & Van Pelt, Doris. (U. Chicago) **Studies in aphasia: Background and theoretical formulations.** *J. speech hear. Dis.*, 1960, 25, 323-332.—Theoretical construct of aphasia leading to ongoing clinical procedures and research into disordered language processes. The usual dichotomy of sensory input to motor output fails to express the essential integrative process. A model for the sequence the authors are using is demonstrated, with the aphasias shown as disruptions in the symbolic language process.—M. F. Palmer.

3765. Young, M. A. (State U. Iowa) **Predicting severity of stuttering.** *Dissertation Abstr.*, 1960, 21, 1627.—Abstract.

#### MENTAL RETARDATION

3766. Belinkoff, Cornelia. **Community attitudes toward mental retardation.** *Amer. J. ment. Defic.*, 1960, 65, 221-226.—Observations concerning community attitudes toward mental retardation made during the process of locating suitable Ss for an experimental class for 5-7-year-old educable mentally retarded children are briefly presented. Children who met the criteria for admission (namely, IQ 50-75 on the Stanford-Binet Form L) and who were without observable organic defect were difficult to locate.—V. M. Staudt-Sexton.

3767. Deb, Subimal. (Calcutta, India) **Gustatory perception of mentally deficient.** *Indian J. Psychol.*, 1958, 33, 177-182.—10 morons, 10 imbeciles, and 10 idiots were presented with 4 different solutions and asked to name the resulting tastes. "Morons are provided with gustatory perception of 4 different kinds of tastes. . . . More than 50% of the imbeciles cannot perceive the tastes of sugar, salt, chilli and tamarind. Idiots have no gustatory perception."—C. T. Morgan.

3768. Khomskaya, E. D. (U. Moscow, USSR) **Sovmeshchenie raznykh sistem svyazei u umstvenno otstalykh detei.** *Soboshchenie I.* [Com-

bination of different associative systems in mentally retarded children. Communication I.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, No. 5, 125-128.—A series of conditioning experiments were conducted with 18 mildly defective children (age 9-12) for the purpose of pointing out the disturbance in synthesizing activity.—A. Cuk.

3769. Lipman, R. S., & Griffith, B. C. (Edward R. Johnstone Training & Research Center, Bordentown, N.J.) **Effects of anxiety level on concept formation: A test of drive theory.** *Amer. J. ment. Defic.*, 1960, 65, 342-348.—"The present study tested drive theory by examining the relationship between anxiety and concept formation. An adapted version of the Children's Manifest Anxiety Scale (CMAS) was administered to 115 institutionalized retardates of both sexes. In a concept formation task, Ss were required to report similarities within sets of words. The relative strength of the correct response was estimated for this task by the number of individual words in a set the Ss defined by an acceptable abstraction. A high negative correlation ( $-.51$ ,  $P < .001$ ) was found between CMAS scores and concept formation scores. High anxiety Ss were particularly penalized when the words in the concept sets did not elicit a single possible abstraction. This finding plus the finding that the decrement in concept attainment due to high anxiety was greater on difficult stimulus sets ( $-.37$ ,  $P < .05$ ) was interpreted as supporting drive theory. The study failed, however, to find the predicted facilitative effect when the correct response was dominant. This finding and previous failures to find the facilitative effect were discussed in terms of variables that may affect task-irrelevant responses."—Author summary.

3770. Pare, C. M. B., Sandler, M., & Stacey, R. S. (Bethlem Royal Hosp., London, England) **5-hydroxyindole in mental deficiency.** *J. Neurol. Neurosurg. Psychiat.*, 1960, 23, 341-346.—"The serum 5-HT [hydroxytryptamine] concentration and urine 5-HIAA [hydroxyindoleacetic acid]/creatinine ratio in 83 mentally defective patients have been compared with those of 68 subjects in various control groups. In many of the defective cases both were raised. The results are analysed and discussed." (1 fig., 4 tables, 19 ref.)—Author summary.

3771. Tarjan, G., Dingman, H. F., & Miller, C. R. **Statistical expectations of selected handicaps in the mentally retarded.** *Amer. J. ment. Defic.*, 1960, 65, 335-341.—"Newly admitted and resident patients were examined for those handicaps which constitute major nursing problems. These disabilities were plotted against age and IQ and were presented in the form of topographic charts. The findings call attention to the need for intensified habilitation programs and lend themselves to estimating the probabilities of those handicaps in patient groups when age and IQ are known."—Author summary.

(See also Abstract 3150)

#### Evaluation & Performance

3772. Barnett, C., Ellis, N. R., & Pryer, M. W. **Serial position effects in superior and retarded subjects.** *Psychol. Rep.*, 1960, 7, 111-113.—"Forty-six institutionalized retardates (slow learners) and

47 normal high school students (fast learners) learned a list of 10 one-syllable nouns to a criterion of one errorless trial. The resulting serial position curves were analyzed by first expressing S's errors at each serial position as a percentage of his total errors, and then averaging over the group. . . . [as] the fast learners tended to make proportionately more errors near the center of the list. . . . the hypothesis developed by McCrary and Hunter (1953), that the distribution of percentages of serial errors is an invariant property of rote learning, apparently cannot be extended to include divergent curves resulting from ability differences."—C. H. Ammons.

3773. Bialer, I., & Cromwell, R. L. (George Peabody Coll. Teachers) **Task repetition in mental defectives as a function of chronological and mental age.** *Amer. J. ment. Defic.*, 1960, 65, 265-268.—Both MA and CA were related to the repetition-choice, children at the younger age levels in each case tending to return to the successful activity and those at the older age levels tending to return to the failed activity. It was suggested that this finding might offer aid in formulating differential success and failure experiences for retarded children in the special classes.—V. M. Staudt-Sexton.

3774. Busemann, Adolf. **Psychologie der Intelligenzdefekte mit besonderer Berücksichtigung der hilfsschulbedürftigen Deblität.** [Psychology of defective intelligence under special consideration of retardates in need of special schools.] Munich, Germany, Ernst Reinhardt, 1959. 611 p. DM 28.00.—The concept, structure, and development of intelligence and the influence of the environment on the latter are discussed. Affects interfere with intellectual output. Defects may be expressed by abnormal activity, excitability, psychic plasticity, perception, experiencing of objects and abnormal experiencing of persons. Defects of fantasy, analysis of facts, counting, speech, writing, reading, understanding, ego-functions, etc., are discussed in detail. (18-p. bibliogr.)—L. W. Brandt.

3775. Cantor, G. N. (George Peabody Coll. Teachers) **Motor performance of defectives as a function of competition with same- and opposite-sex opponents.** *Amer. J. ment. Defic.*, 1960, 65, 358-362.—32 pairs of defective Ss were given the Placing subtest of the Minnesota Rate of Manipulation Test. 16 of the pairs involved same-sex opponents (8 M-M and 8 F-F), and the remaining 16 pairs consisted of opposite-sex opponents. The main effects of sex and sex of opponent were nonsignificant, as were all the interactions. The group as a whole improved significantly in performance from Trial I to II and from Trial II to III, but not from Trial III to IV. The results afforded no support for the contentions that anxiety engendered by having to compete with members of the opposite sex would interfere with performance in these Ss. A qualitative examination of the scores on Trials III and IV revealed that about 73% of the Ss rated "very low" in performance, relative to the normative group.—V. M. Staudt-Sexton.

3776. Cromwell, R. L., & Foshee, J. G. (George Peabody Coll. Teachers) **Studies in activity level: IV. Effects of visual stimulation during task per-**

formance in mental defectives. *Amer. J. ment. Defic.*, 1960, 65, 248-251.—23 pairs of organic and familial Ss, matched for CA and MA, were raised to a stabilized level of performance on a card sorting task. They were then measured simultaneously for activity level and card-sorting performance, once under reduced and once under increased visual stimulation conditions. No differences in activity or performance were found as a function of amount of visual stimulation, of organic-familial classification, of sequence or stimulus conditions. However, a non-predicted interaction was found in activity level as a function of organic-familial classification and sequence. Familials showed an increment in activity as time elapsed, while the organics showed a non-significant decrement in activity.—V. M. Staudt-Sexton.

3777. Daly, W. C., & Lee, R. H. (Orient State Inst., Orient, O.) **Reading disabilities in a group of M-R children: Incidence and treatment.** *Train. sch. Bull.*, 1960, 57, 85-93.—The incidence of reading disability in 77 mentally retarded male and female institutionalized children between ages 10.2 and 18.6 inclusive. Speed of reading was compared with mental age reading grade level (based on WISC and the Wechsler Bellevue Intelligence Scale, Form I, depending on life age). The conclusions were as follows: (a) Reading ability compatible with or exceeding mental age reading grade level was found in 62% of the cases. (b) A reading disability existed in 38% of the total number. (c) 30% of the female group revealed a reading disability. (d) 48% of the male group revealed a reading disability. These results seem to indicate the necessity for a different type of reading stimulation, perhaps with more controls over teaching methods.—V. M. Staudt-Sexton.

3778. Dingman, H. F., Windle, C. D., Eyman, R. K., & Musselman, D. (Pacific State Hosp., Pomona, Calif.) **Factor analysis of a magazine interest test.** *Amer. J. ment. Defic.*, 1960, 65, 59-63.—"Choices among five magazines of varied appeals by 281 mentally retarded patients were studied. Factors of general sex interest, sensationalism, conformity and masculine interest were demonstrated."—Author summary.

3779. Fisher, G. M. (Pacific State Hosp., Pomona, Calif.) **The altitude quotient as an index of intellectual potential: I. WAIS data for familial and undifferentiated mental retardates.** *Amer. J. ment. Defic.*, 1960, 65, 252-255.—Neither age nor IQ level was significant in determining the magnitude of the AQ-IQ difference score, and the mean difference score between IQ (level of functioning) and AQ (potential intellectual functioning) was 16.9.—V. M. Staudt-Sexton.

3780. Fisher, G. M. (Pacific State Hosp., Pomona, Calif.) **Differences in WAIS verbal and performance IQ's in various diagnostic groups of mental retardates.** *Amer. J. ment. Defic.*, 1960, 65, 256-260.—"The protocols of 508 Ss of subnormal intelligence who had been administered all 11 subtests of the WAIS and who achieved at least 11 scale scores were examined for the differences in Verbal and Performance IQ's. The analyses indicate that: (1) for the diagnostic groups due to central nervous system infection and other organic

nervous diseases, VIQ was significantly higher than PIQ; . . . (2) there was no statistically significant difference between VIQ and PIQ for the groups undifferentiated, familial, functional, epilepsy, trauma, and suspected mental deficiency; (3) although the magnitude of the VIQ-PIQ difference in Wechsler's "below IQ 80" sample was smaller than the difference that obtained in the total WAIS population, the present study indicates that in all groups of retardates, with the exception of the familials, the distribution and magnitude of the differences between VIQ and PIQ are the same as those found in Ss of other intelligence levels."—*Author summary.*

3781. Fisher, G. M. (Pacific State Hosp., Pomona, Calif.) **Sexual identification in mentally retarded male children and adults.** *Amer. J. ment. Defic.*, 1960, 65, 42-45.—Between the ages of 7 and 63 years, mentally retarded males with mental ages between 2 and 12 years identify with the male figure as frequently as do normal children.—*V. M. Staudt-Sexton.*

3782. Forssman, H. (U. Göteborg, Sweden) **Mongolism among inmates of Swedish institutions for mentally deficient: Rate and age distribution.** *Amer. J. ment. Defic.*, 1960, 65, 32-36.—During 1955-59 the author made a personal examination of all people enrolled in institutions for the mentally deficient in Sweden. 12,903 persons from 203 different institutions were examined in all. Of these, 1267 were affected by mongolism. For comparative purposes, data on the frequency of mongolism in institutions for the mentally deficient in various countries at different periods of the 20th century are presented. In the Swedish group, 681 (53.7%) were males and 586 (46.3%) were females. 797 (63%) were below age 20 and 470 (37%) above age 20.—*V. M. Staudt-Sexton.*

3783. House, Betty J., & Zeaman, D. (U. Connecticut) **Visual discrimination learning and intelligence in defectives of low mental age.** *Amer. J. ment. Defic.*, 1960, 65, 51-58.—"Individual differences in the acquisition of visual discriminations were studied in relation to M.A. and IQ in a group of mental defectives of low M.A. . . . Individual differences in the speed of acquisition of the object discrimination were correlated .73 with those in the pattern discrimination, a finding interpreted as evidence for a construct 'visual discrimination learning ability.' M.A. and IQ were correlated -.55 and -.51 respectively with an error measure of discrimination performance. A partial correlational analysis and other evidence led to the conclusion that M.A. and IQ were independently related to learning. An alternative interpretation of the results was offered which held that the individual differences observed in performance on the visual discrimination task were those of attention rather than learning."—*Author summary.*

3784. Miller, M. B. (George Peabody Coll. Teachers) **Psychometric and clinical studies in mental deficiency, 1954-59: A selective review and critique.** *Amer. J. ment. Defic.*, 1960, 65, 182-193.—"Clinical and psychometric studies with retarded Ss in the period 1954-59 were reviewed for their contributions to scientific utility, i.e., their predictive value. The trends observed were as follows: (1)

Rapid screening techniques have been developed which have reasonably high utility. (2) . . . the Revised Stanford-Binet is a highly stable measure of intelligence. . . . (3) To date, so-called "culture-fair" tests appear, if anything, to be inherently biased against the retarded Ss. (4) Some newer measures of intelligence seem to be minimally useful as global measures. It might prove more fruitful to move in the direction of assessing specific abilities with such instruments. (5) Scatter and pattern-analysis studies yield the most conspicuously inconsistent results in this area. (6) Psychological tests for brain injury yield relatively unreliable results. (7) Research using projective techniques with retarded Ss has apparently abated. This is unfortunate, since studies on the efficacy of using the most important techniques with retardates remain to be done."—*Author summary.*

3785. Osborn, W. J. (Ladd School, Exeter, R.I.) **Associative clustering in organic and familial retardates.** *Amer. J. ment. Defic.*, 1960, 65, 351-357.—"Familial, organic, and control Ss were matched for M.A. and compared with respect to their functioning on the associate clustering task. No significant differences were found between organics and familials on this task, and both retardate groups recalled pictures and organized them conceptually as adequately as did the control group. There were qualitative differences, however, in the manner in which the retardates developed their total scores, suggesting inefficiencies in functioning which may be related to inappropriate learning habits."—*Author summary.*

3786. Schwartz, Lewis, & Levitt, Eugene E. **Shortforms of the Wechsler Intelligence Scale for Children in the educable, non-institutionalized mentally retarded.** *J. educ. Psychol.*, 1960, 51, 187-190.—The purpose of the study was to develop a short-form of the WISC for testing mentally retarded children. Correlations were run between Full Scale WISC scores and individual subtest scores. All possible duads, triads, tetrads, pentads, and hexads were used on a sample of 145 children who were mentally retarded. The Full Scale IQ quotients for this group on the WISC was 50-80 with a mean of 80. Statistical computations suggest that only pentad and hexad short forms can be substituted for the Full Scale.—*W. E. Hall.*

3787. Sievers, Dorothy J., & Rosenberg, C. M. (Columbus State School, O.) **The Differential Language Facility Test and electroencephalograms of brain-injured mentally retarded children.** *Amer. J. ment. Defic.*, 1960, 65, 46-50.—"The EEG tracings of 50 brain-injured mentally retarded children were grouped into four categories: (1) grand mal pure, (2) grand mal and petit mal mixed, (3) hypothalamic and (4) slowing. The scores of the four groups on the Differential Language Facility Test were compared. There were significant differences between groups on the two subtests that involve the audio-vocal channel on the integrational and grammatical levels. The Grand Mal Mixed With Petit Mal group was significantly lower than the Slowing group on both tests. On one subtest the Slowing group was also significantly higher than the Hypothalamic group. On the other subtest the Grand Mal Mixed

With Petit Mal group also had a significantly poorer performance than the Hypothalamic group. The Grand Mal-Pure group and the Slowing group were significantly different."—*Author summary.*

3788. Stearns, P. E., Droulard, K. E., & Sahhar, F. H. Studies bearing on fertility of male and female mongoloids. *Amer. J. ment. Defic.*, 1960, 65, 37-41.—"Laboratory study of sperm in three separate semen specimens of those patients who were able to produce an ejaculate revealed grossly subnormal counts in 5 patients and complete absence of sperms in 4 other patients; 10 patients were unable to produce an ejaculation, and 2 patients were unable to maintain an erection or produce a specimen. For the females, axillary hair was present in 7 of 23 patients; pubic hair in all except one, who was 12 years old; breast development was absent in only 4, all of who were less than 15 years of age. No patient below age 15 had had the menarche; nor had one patient aged 19; one 16-year-old had only 4 periods in the preceding 12 months. In 9 of 12 patients between age 16 and 46, menses were comparatively normal. The hope is expressed that others will undertake similar studies so that the results can be pooled for statistical analysis."—*Author summary.*

3789. Stott, D. H. Evidence for pre-natal impairment of temperament in mentally retarded children. *Vita hum.*, 1959, 2, 125-148.—"In a comprehensive study of the life-histories of 188 mentally defective and scholastically very backward children matched with normal controls, close associations had been observed between disturbed pregnancy and a series of physical and mental handicaps (infantile ill-health, congenital malformation, mental subnormality) of an order which suggested a syndrome of pregnancy/general-impairment." The predominant temperament of the Ss (42%) was "unforthcomingness" (a lack of confidence, avoidance of response, timidity). This was related more closely to the syndrome than to any other factors. A variety of alternative explanations is presented.—*J. L. Yager.*

3790. Tarjan, George. (Pacific State Hosp., Pomona, Calif.) Research in mental deficiency with emphasis on etiology. *Bull. Menninger Clin.*, 1960, 24, 57-69.—2 groups of mental deficiencies are recognized: the "physiological," which follows the end of the theoretical IQ distribution curve, and the "pathological," which represents a separate distribution with a mean around IQ 30. The physiological outnumber the pathological approximately 16-1. Implications for research are noted with specific reference to: biochemical investigations, carriers, and possible alteration of biochemical phenotypes; new growth, organ abnormalities, and fetal-maternal antigenic reactions; chromatin patterns, chromosomes, and mongolism; and the relation between the childhood schizophrenias and the mental deficiencies.—*W. A. Varvel.*

3791. Tobias, J., & Gorelick, J. (Ass. Help Retarded Children, NYC) The effectiveness of the Purdue Pegboard in evaluating work potential of retarded adults. *Train. sch. Bull.*, 1960, 57, 94-104. Retarded adults at all levels are significantly inferior to average industrial applicants in manipulative dexterity. Wherever an equivalent correlation with IQ was computed, the Purdue Pegboard appeared to be a superior instrument in predicting productivity on

the type of work available at the workshop.—*V. M. Staudt-Sexton.*

3792. Tobias, J., & Gorelick, J. (Ass. Help Retarded Children, NYC) The utility of the Goodenough scale in the appraisal of retarded adults. *Amer. J. ment. Defic.*, 1960, 65, 64-68.—The highest correlation was found with the Performance Score on the WAIS; similar factors are required for achievement on these tests. Goodenough Raw Score is related to a standardized measure of work efficiency, the Evaluation Test Scores, and appears to predict work efficiency as well as does the WAIS Full Scale IQ but not as well as does the WAIS Performance Score.—*V. M. Staudt-Sexton.*

(See also Abstracts 2864, 3252, 3406)

#### Education & Treatment

3793. ———. Report of conference: Development of parental aids for the retarded in leisure time and work activities. *Train. sch. Bull.*, 1960, 57, 66-104.—A preface describing the purpose and goal of the conference (sponsored by the Training School at Vineland, New Jersey) is followed by the complete text of a lecture entitled "Some Basic Considerations in Helping the Family with the Retarded Child's Work and Play" by George S. Stevenson. Brief reports of 5 panels and a listing of the participants are also included as follows: "The Pre-School Child," "The Mildly Retarded Child of School Age," "The Moderately Retarded Child of School Age," "The Mildly Retarded Young Adult," and "The Moderately Retarded Young Adult."—*V. M. Staudt-Sexton.*

3794. Kratter, Frederick E. (Letchworth Village, Thiells, N.Y.) Negative and positive eugenic programs for mental defectives. *J. gen. Psychol.*, 1960, 63, 203-210.—Negative eugenic programs entail certain methods whereby a readjustment can be effected in those below mental average. The measures advocated are grouped under the headings of celibacy, sexual abstinence, marriage regulations, segregation, contraception, abortion, and sterilization. These steps are discussed for both their merits and drawbacks, followed by an outline of a positive eugenic program for those above average intelligence. Family allowance, relief of taxation, educational opportunities, and birth control are advocated with special reference to countries where some of the above measures have already been implemented. All specialized methods of improving human stock should be supplemented by an improvement of living conditions, both in relation to the home and to the place of employment. It was likewise stressed that eugenics and eugenics must go hand in hand to lead to a successful eugenic program.—*Author abstract.*

3795. O'Connor, N. (Maudsley Hosp., U. London, England) Problem solving and mental defect. *Cerebral palsy Bull.*, 1959, No. 6, 9-13.—"The traditional view is that the low-grade mental defective is relatively ineducable. It is suggested that part of this ineducability may be traced to conditions of deprivation which are not conducive to the learning of fundamental processes upon which other learning may take place."—*C. T. Morgan.*



3796. Tisdall, W. J. (U. Illinois) **A follow-up study of trainable mentally handicapped children in Illinois.** *Amer. J. ment. Defic.*, 1960, 65, 11-16.—"One hundred twenty-six subjects were followed up five years after they had been enrolled in public school classes for the trainable mentally handicapped. . . . One-fourth of the follow-up subjects were found to be at home where they were receiving no formal training. One-fourth were still in the special classes and one-fifth were located in private, parent-sponsored classes for over-school-age trainable retarded children. The remainder of the follow-up sample were in institutions, in sheltered workshops, in classes for the educable mentally handicapped, had moved from their communities, or were deceased."—*Author summary.*

#### BEHAVIOR PROBLEMS

3797. Hetzer, H., & Giehr, E. (Danzigerstrasse 4, Weilburg/Lahn, Germany) **Entwicklungsprofile von Kindern mit Anpassungsschwierigkeiten.** [Developmental profiles of maladjusted children.] *Psychol. Beitr.*, 1960, 4, 26-37.—Results of experiments with developmental tests (C. Buehler & H. Hetzer) are presented in a "developmental profile." Comparison of profiles of 30 maladjusted and 30 normally adjusted children shows that maladjusted children show a relatively high degree of development concerning mental production and a low degree of development concerning social contact. This characteristic profile was found only in 16.4% of the control cases. (English & French summaries)—*H. J. Priester.*

3798. Sato, Tokijiro. (Tohoku U., Sendai, Japan) **Clinicoelectroencephalographical study of maladjusted children in wide sense, especially about the significance of abnormal EEG in behavior-problem children.** *Folia psychiat. neurol. Jap.*, 1960, 14, 107-122.—44 "behavior problem children," compared with 570 maladjusted children with specific or psychiatric diagnosis and 271 normal children, showed 79% abnormal or borderline EEGs. Of the behavior problem children, 20% had epileptic discharges and 24% slow waves; the latter were thought to be evidence of a defect in brain maturation.—*W. A. Wilson, Jr.*

(See also Abstracts 3491, 3908)

#### Alcoholism

3799. Kragh, Ulf. (Inst. Military Psychology, Stockholm, Sweden) **Pathogenesis in dipsomania: An illustration of the actual-genetic model of perception-personality. Part I.** *Acta psychiat. neurol. Scand., Kbh.*, 1960, 35, 207-222.—. . . case of dipsomania is analysed by means of the actual-genetic method, which may be described as a developmental (serial, sequence) analysis of pre-cognitive organization. The experimental procedure consists in the repeated exposure of a picture by the tachistoscope, the exposure time being increased by steps. . . . In the actual-genetic model of perception-personality, perception and personality are brought into connection with each other by reference to the common frame of the experimental operation and the life history respectively.—*R. Kaelbling.*

3800. Malzberg, Benjamin. **The alcoholic psychoses: Demographic aspects at midcentury in**

**New York State.** New Haven, Conn.: Yale Center Alcoholic Studies, 1960. ix, 46 p. \$2.00.—Concentrating on the 1st-admission data for all New York State hospitals from 1 October 1948 to 30 September 1951 the distribution of the alcoholic psychoses are given and briefly discussed with respect to the following characteristics: age, sex, personality, use of drugs, type, prehospitization attack duration, rural-urban environment, marital status, economic status and occupations, education, intellectual status, racial and ethnic differences, place of birth of patient and patient's parents, and migrant status. Average annual rates for selected years from 1910 to 1950 for New York State and mid-century rates for 9 geographic divisions of the United States are included. (15 ref.)—*R. Schaefer.*

3801. Silber, A., Gottschalk, W., & Sarnoff, C. **Alcoholism in pregnancy.** *Psychiat. Quart.*, 1960, 34, 461-471.—A case presentation of a pregnant chronic alcoholic managed cooperatively by a psychiatrist and an obstetrician. In this case the patient was continuously confronted with the child to prevent her from using denial mechanisms. This technique helped prevent a breakthrough of aggressive impulses which might have disrupted fragile reality testing and might possibly have led to a psychotic episode. The success was the result of the cooperation between the obstetrician and the psychiatrist.—*D. Prager.*

3802. Starrels, R. J. (Adult Guidance Center, San Francisco, Calif.) **Alcoholism and the commitment to therapy.** *Amer. J. Psychother.*, 1960, 14, 719-727.—The majority of alcoholics have trouble in making the necessary commitment to psychotherapy. Those who do make a commitment stop drinking with surprising ease; and it appears that it is the making of the commitment, rather than anything which may have occurred in the therapy, which is responsible for this particular change in the clinical picture.—*L. N. Solomon.*

3803. Turfboer, Robert. (Yale U.) **Alcoholism: Management's problem?** *Adv. Mgmt.*, 1960, 25(9), 14-15.—Although in current thinking alcoholism is regarded as being rooted in "a lifelong distortion of the original mother-child relationship," its cost to industry of more than 1 billion dollars a year makes it management's problem. There follows a brief summary of the needs of an alcoholic and a plea for industrial centers for psychotherapy in general.—*E. Q. Miller.*

3804. Ullman, Albert D. (Tufts U.) **Ethnic differences in the first drinking experiences.** *Soc. Probl.*, 1960, 8, 45-56.—Ethnic groups with a high prevalence of alcoholism are likely to permit their members to have their first drinking experience under conditions which are unsanctioned by adults. Members of high alcoholism groups are more likely to remember their first drink, to have had it at a later age, to have had it in a place other than their own home and with persons other than their own families, to have become intoxicated to some degree, and to have been drunk on that occasion. (9 tables)—*R. M. Frumkin.*

#### Sex Deviations

3805. Anthony, Rey. **The housewife's handbook for promiscuity.** Tucson, Ariz.: Seymour,

1960. viii, 103 p. \$5.00.—This book is a personal document, a social psychological sexual autobiography, as well as a treatise on sex education. Although it is written for the layman, as a personal document it is of great significance to behavioral and social scientists interested in the study of sexual behavior. Besides objective accounts of her sexual experiences, which include premarital, marital, extra-marital, and homosexual relations, abortion, fellatio, cunnilingus, etc., the author discusses and evaluates the value of simultaneous climax, vaginal orgasm, sexual imagery, "spontaneous" coital activity, anal stimulation, and sexual varietism. In relation to sex education there are discussions of sex language, obscenity, abortion, sexually normal behavior, and some suggestions for improving sexual relations in our society. Albert Ellis in his introduction states that "In all my years of sex research, in fact, I can only recall the works of one other woman which can compare to the honest sexual reporting of Mrs. Anthony."—*R. M. Frumkin.*

3806. Kurland, Morton L. (VA Hosp., Bronx, N.Y.) **Pedophilia erotica.** *J. nerv. ment. Dis.*, 1960, 131, 394-403.—A brief review of the literature on pedophilia, especially as it touches on etiological considerations, is first presented followed which 3 cases of this condition are discussed and possible psychodynamics are considered.—*N. H. Pronko.*

3807. Lukianowicz, N. (62, Rayens Cross Road, Long Ashton, England) **Imaginary sexual partner.** *Arch. gen. Psychiat.*, 1960, 3, 429-449.—Masturbation is normal in children, young adults, and in adults in the absence of a sexual partner. It is frequently accompanied by fantasies which represent a wish-fulfillment. These fantasies differ mainly in duration from those of imaginary companions frequently found in single and lonely children and from erotic daydreams. The nature of the imaginary sexual partner (sex, animal, fetish) and of the imagined sexual scene (normal, perverse, sadistic) corresponds to the sexual preference of the masturbator as illustrated by 20 cases. Masturbation, visual masturbatory fantasies, and psychiatric illness seem unrelated. (44 ref.)—*L. W. Brandt.*

3808. Lukianowicz, N. **Two cases of transvestism.** *Psychiat. Quart.*, 1960, 34, 517-537.—Conclusions from these 2 cases are that parental rejection of a boy or absence of father figure in his early life impedes male identification, that close visual contact with a little sister may cause female sexual identification by the boy, that overprotectiveness by the mother may cause her son to identify with her, that dressing a boy in girl's clothes may increase his feminine identification.—*D. Prager.*

3809. Westwood, Gordon. **A minority: A report on the life of the male homosexual in Great Britain.** London, England: Longmans, Green, 1960. xii, 216 p. \$7.00.—Summarizes findings relative to a study of 127 adult English male homosexuals involving individual interviews relative to such factors as family pattern and home background, early sexual experiences, nature and extent of homosexual adjustment, heterosexual interests, legal aspects, personal and social adjustment, etc. (Appendices include: research design, statistical data, homosexual vernacular, & 134 ref.)—*D. G. Brown.*

3810. Wood, Edwin C., Rakusin, John M., & Morse, Emanuel. (VA Hosp., West Haven, Conn.) **Interpersonal aspects of psychiatric hospitalization: I. The admission.** *Arch. gen. Psychiat.*, 1960, 3, 632-641.—Of 48 admissions interviewed within the subsequent 24 hours, 13 were found to have followed demands of family members. This "family group" differed from the "patient group" by remaining a significantly shorter period of time in the hospital. Hospitalization in itself seemed to be expected to effect changes in behavior in the patient and/or in the family members besides being sought for the relief of symptoms. Conflicts or changes in the living situation prior to admission appeared in 77% of the cases. Only 2 of the 48 patients showed concern about possible effects of hospitalization on their jobs. 4 case histories and an 18-item admission questionnaire are presented.—*L. W. Brandt.*

(See also Abstract 3559)

#### Drug Addiction

#### CRIME & DELINQUENCY

3811. Arbuckle, Dugald S., & Litwack, Lawrence. (Boston U.) **A study of recidivism among juvenile delinquents.** *Fed. Probation*, 1960, 24(4), 45-48.—500 releases from a Massachusetts correctional school for boys were studied. A high positive relationship was found between success on parole and: height, mother's age, school grade completed, parole to work versus parole to attend school, and age. A high negative relationship was found with the number of times in discipline status prior to parole, and incidence of boy's father in jail.—*R. W. Deming.*

3812. Banay, Ralph S. (Youth Inst., Ossining, N.Y.) **Violent youth.** *J. soc. Ther.*, 1960, 6, 207-215.—Cases are briefly described to show that with material advances criminal acts of youth have become much more severe. Part of the responsibility lies with delinquent parents. Instead of blaming the culture, more attention should be paid to the organic makeup of the offenders. Recommends the establishment of an Institute of Criminal Science.—*E. D. Lawson.*

3813. Ferreira, Antonio J. (2060 Clamar Way, San Jose, Calif.) **The "double-bind" and delinquent behavior.** *Arch. gen. Psychiat.*, 1960, 3, 359-367.—A case report of 30 sessions with a 15-year-old delinquent boy and his parents is used to illustrate how 2 messages belonging to 2 different logical types and coming from the 2 parents form a "split-double-bind." The mother makes a negative statement about the father's statement. Both statements involve punishment for the boy. One punishment-threat replaces the other. None can ever be fully carried out. The boy's way out is to leave the field. The parents do not see each other in disagreement but see the disobedience of the boy as the only problem. The pattern differs from the "double-bind" described by Bateson as schizophrenogenic in so far as in the latter the 2 irreconcilable statements come from the same person.—*L. W. Brandt.*

3814. Geiger, Sara G. (Milwaukee County Guidance Clinic, Wis.) **Organic factors in delinquency.**

*J. soc. Ther.*, 1960, 6, 224-237.—Many types of physical condition can contribute to delinquency. Several cases of delinquents are described showing the presence of 6 and 14 per second positive spikes or 6 or 14 per second positive spikes when EEG studies were made. (17 ref.)—E. D. Lawson.

3815. Glaser, Daniel. (U. Illinois) **Differential association and criminological prediction.** *Soc. Probl.*, 1960, 8, 6-14.—On the basis of criminological prediction literature it was concluded that differential association theory is superior to alternative theories using philosophy of science standards. It was suggested, however, that a differential anticipation theory would meet such standards even more adequately than differential association. (20 ref.)—R. M. Frumkin.

3816. Glueck, Eleanor T. (Harvard U.) **Efforts to identify delinquents.** *Fed. Probation*, 1960, 24(2), 49-56.—This is essentially an annotated bibliography of studies examining the success and usefulness since 1956 of the Glueck Social Prediction Table for Identifying Potential Delinquents. Studies are broken down into Retrospective Studies and Prospective Studies. The general finding is that the table has remarkable efficiency in predicting future delinquents.—R. W. Deming.

3817. Grunspun, Haim. **A crianca delinquent.** [The delinquent child.] *Rev. Psicol. norm. patol.*, Sao Paulo, 1960, 6, 51-89.—A discussion of the delinquent child, studying the evolution of delinquency from simple delinquent acts to progressively more serious behavior. Distinctions are made among pre-hysterical personality, maladjustment, retardation, and psychopathy as causes; and differential treatment is proposed for each cause.—G. Solyanis.

3818. Livermore, Jean. **Identification of teen-age girls with Mexican-American minority.** *Amer. J. Orthopsychiat.*, 1960, 30, 630-636.—There is a type of delinquent or borderline delinquent teen-age girl in the area of Los Angeles who manifests a preference for Mexican-American companions. The bases for identification include that both she and her minority friends are outcast, both see themselves as bad, both see themselves as castrated, both feel they have severe conflicts with authority, both tend to handle their problems passively. There is an appeal for these girls in the strict, structured, Catholic Mexican homes.—R. E. Perl.

3819. McKay, Henry D. (Inst. Juvenile Research, Chicago, Ill.) **Differential association and crime prevention: Problems of utilization.** *Soc. Probl.*, 1960, 8, 25-37.—All activities which alter or seek to alter human experiences differentially in order to prevent or treat crime are essentially based on the theory of differential association. At present the utilization of the theory is not the kind to insure more than fair prospects for the control of delinquency in the inner city areas of large cities.—R. M. Frumkin.

3820. Schwitzgebel, Ralph. (Lesley Coll.) **A new approach to understanding delinquency.** *Fed. Probation*, 1960, 24(1), 31-35.—The Department of Social Relations at Harvard has been hiring hardened delinquents for the purpose of self-rehabilitation. Ss are paid in cash immediately after each hour. The "hour" is a recorded interview with a

psychologist-therapist. Procedures have ranged from nondirective counseling to "on-the-couch psychoanalytic intensive interviewing." Results are reported and discussed.—R. W. Deming.

(See also Abstract 3489)

#### Personality Characteristics

3821. Browning, Charles J. (Whittier Coll.) **Differential impact of family disorganization on male adolescents.** *Soc. Probl.*, 1960, 8, 37-44.—The findings in this study of matched delinquent and nondelinquent boys support the hypothesis that delinquents are as likely to come from disorganized but structurally unbroken homes as they are from broken homes. Therefore, whether or not broken homes are over-represented in court records, as Nye found, may have more legal than sociological or psychological import. (18 ref.)—R. M. Frumkin.

3822. Cline, V. B., & Wangrow, A. S. (U. Utah) **Life history correlates of delinquent and psychopathic behavior.** *J. clin. Psychol.*, 1959, 15, 266-270.—Comparison of the life history experiences of 70 recidivist criminals and 70 controls matched for age, sex, intelligence, socioeconomic background, and race, utilizing an interview form. Major differences found in 7 areas: school, religion, family and child rearing, leisure time, occupation, sex-marriage, and miscellaneous factors and personal habits.—F. N. Arnhoff.

3823. Shanker, Uday. (Delhi, India) **Rorschach responses of a group of juvenile thieves.** *Indian J. Psychol.*, 1956, 31, 125-130.—The Rorschach was given to 37 thieves and scored according to Klopfer and Kelley's method. Tables showing the distribution of locations, contents, and determinants are given. The delinquents gave far more D and d or dd than W and WX. A and Ad predominated in comparison with H or Hd. FM was relatively high compared with M. The Rorschach may have value in the assessment of the personality patterns of delinquents.—C. T. Morgan.

#### Prevention & Treatment

3824. Cowden, J. E. (U. Wisconsin) **Affective responses of institutional delinquents to authoritarian and permissive treatment.** *Dissertation Abstr.*, 1960, 21, 1629.—Abstract.

3825. Forman, B. (U. Southern California) **The effect of differential treatment on attitudes, personality traits, and behavior of adult parolees.** *Dissertation Abstr.*, 1960, 21, 1652.—Abstract.

3826. Lipton, Harry R. (Medical Correctional Ass., Atlanta, Ga.) **Stress in correctional institutions.** *J. soc. Ther.*, 1960, 6, 216-223.—Anxiety states occur probably 10 times as often among prison inmates as among normal civilians. Some inmates become apathetic, some maniacal. Anxiety states among prisoners are specifically related to the imprisonment. Separation from home and homosexual conflicts are other sources of anxiety. The assistance of chaplains and psychiatrists is of some help.—E. D. Lawson.

3827. Overholser, Winfred. (St. Elizabeths Hosp., Washington, D.C.) **The role of psychiatry in correctional administration.** *J. soc. Ther.*, 1960,

6, 197-206.—Traces the development of psychiatric programs in prisons from 1870 to the present. Description of some current advances such as group psychotherapy.—*E. D. Lawson.*

3828. Zald, Mayer N. (U. Chicago) **The correctional institution for juvenile offenders: An analysis of organizational "character."** *Soc. Probl.*, 1960, 8, 57-67.—Some striking characteristics about correctional institutions are: (a) the critical climate of opinion in which they operate, (b) the fact that they are resource-deprived institutions, (c) the abstract quality of rehabilitation goals and the difficulty of proving one technique to be more successful than another, (d) the multiplicity of functions assigned the institutions, and (e) the fact that these are total institutions. (39 ref.)—*R. M. Frumkin.*

#### PSYCHOSES

3829. Cornelison, F. S., & Arsenian, J. **A study of psychotic patients to photographic self-image experience.** *Psychiat. Quart.*, 1960, 34, 1-8.—This is an initial report with limited sampling and no matched control. All the psychotics recognized the self-image despite defective ego functioning. Psychotic females showed a stronger investment of libido in the face. Self-photographs seemed to induce emotional catharsis in at least 4 patients. Degree and kind of narcissism may affect a psychotic's response to photographic self-images. Photographic self-image experience may afford an adjunct to psychotherapy with seriously disturbed persons.—*D. Prager.*

3830. Donnelly, Ellen M. (U. Pittsburgh) **The quantitative analysis of parent behavior toward psychotic children and their siblings.** *Genet. psychol. Monogr.*, 1960, 62, 331-376.—"There were significant differences in the parental behavior shown toward the psychotic child as compared with its siblings for the dimensions of control, warmth, and home-general. Twenty of the 30 variables showed significant differences at the .05 level or better (Fisher's 't'). The parents' behavior toward the psychotic child, as compared with that toward their siblings, was: less acceptance of the child as an individual and a member of the family, less ability to understand the child's capacities and needs, more emotionally driven, impulsive rather than rational behavior toward the child, and more distance and aloofness in the parent-child relationship."—*C. T. Morgan.*

3831. Eitenger, Leo. (Oslo U. Hosp., Oslo, Norway) **Psychiatric investigations among refugee patients in Norway.** *Ment. Hyg.*, NY, 1960, 44, 91-96.—Using refugee patients in Norway the present investigator found the "same persecutory delusions in patients with both paranoid reactions—with schizophrenia and with chronic brain syndromes" which lead him to conclude that the same psychodynamic chain of causality brought these symptoms into being.—*M. A. Seidenfeld.*

3832. Fry, W. F., Jr. **Destructive behavior on hospital wards.** *Psychiat. Quart. Suppl.*, 1959, 33, 197-231.—Destructive behavior by 1 or more psychotic ward patients is frequently triggered by a particular pattern of interaction of staff personnel.

Continuous covert disagreement with need for discharge of tension may be linked with ward riots. Riot data also correspond to the criteria established in the double bind hypothesis of Bateson. Riot behavior in the psychotic shows some similarity to the territory struggle behavior in the lower animals.—*D. Prager.*

3833. Gordon, H. L., Law, A., Hohman, K. E., & Groth, C. **The problem of overweight in hospitalized psychotic patients.** *Psychiat. Quart.*, 1960, 34, 69-82.—Among several hundred psychotics, significantly more overweight than underweight patients were found. Significantly more psychotics were currently gaining than losing weight. On admission, underweight patients outnumbered overweight patients; and most patients tended to gain for the 1st 4 months after admission. For the 1st 6 months of administration, tranquilizers resulted in considerable weight gain. Patients showing the least psychiatric improvement with tranquilizers were among those showing little weight gain or weight loss. Suggestions were offered to prevent mental patients from becoming overweight.—*D. Prager.*

3834. Gressot, Michel. **L'idée de composante psychotique dans les cas-limites accessibles à la psychothérapie.** [The notion of a psychotic component in borderline states accessible to psychotherapy.] *Encephale*, 1960, 49, 290-304.—Borderline states involve the composition of a psychotic system with diverse adaptive systems, which are neurotic, psychopathological and normal. The composition is not hierarchic due to the weakness of the synthetic function of the ego. The organization of symptoms in 70 cases is analyzed. The following conclusions are reached: (a) borderline cases show alternate patterns of symptoms, while presenting a common specific denominator; (b) the common denominator consists in a mixture of traits symptomatic of different psychopathies; (c) the successive reactions seem to accompany a fragmentation of the ego, characterized by the defective integration of reactive functions; (d) secondary symptoms are less characteristic in isolation than the syndromal configuration; (e) borderline states seem to be "para-neurotic" or "para-psychotic."—*W. W. Meissner.*

3835. Jung, C. G. **Collected works. Vol. III. The psychogenesis of mental disease.** New York: Pantheon, 1960. 312 p. \$4.50.—Contains writings originally published between 1907 and 1958. "The Psychology of Dementia Praecox" (1907) makes up half of the book, the rest being 10 shorter writings, such as, "The Content of Psychoses," "On Psychological Understanding," "On the Problem of Psychogenesis in Mental Disease," "On the Psychogenesis of Schizophrenia," "Schizophrenia," and a few titles of less than 10 pages each. (155 ref.)—*T. F. Naumann.*

3836. Wyke, Maria, & Warrington, Elizabeth. (National Hosp., Queen Square, London, England) **An experimental analysis of confabulation in a case of Korsakoff's syndrome using a tachistoscopic method.** *J. Neurol. Neurosurg. Psychiat.*, 1960, 23, 327-333.—"Different interpretations of the phenomenon of confabulation are reviewed. An experimental analysis of confabulation in a case of Korsakoff's syndrome is reported. The facilitation



of confabulation by tachistoscopic presentation of particular types of visual stimuli is reported. It is suggested that confabulation should be considered a primary symptom of Korsakoff's syndrome and not a result secondary to memory defect." (5 fig., 15 ref.)—*Author summary.*

(See also Abstracts 3098, 3305, 3483, 3696, 3800)

#### Schizophrenia

3837. Adams, H. E. Statistical rigidity in schizophrenic and normal groups measured with auditory and visual stimuli. *Psychol. Rep.*, 1960, 7, 119-122.—"Rigidity is defined statistically as decreased variance of responses in stimulus situations in which no definitive response is apparent to S. A variance score was devised for the Perceptual Reaction Test, a visual test of 60 abstract designs, and the Auditory Test (50 sounds) which were given to 47 white male and 36 white female college students and to 41 white male and 40 white female patients who had been diagnosed schizophrenic. Schizophrenic Ss were significantly more rigid than normal Ss. Rigidity as measured by responses to stimuli of one sense modality is positively related to rigidity as measured in another sense modality. There are no apparent sex differences in rigidity. This response measure of rigidity was highly reliable, varying from .88 to .97."—C. H. Ammons.

3838. Alanen, Yrjö O. (Helsinki U., Finland) Some thoughts of schizophrenia and ego development in the light of family investigations. *Arch. gen. Psychiat.*, 1960, 3, 650-656.—Schizophrenia is not simply seen as a libido regression to primary narcissism but as an impairment in ego formation. The mother or, in some cases, the father may make normal object relationships impossible. The separation from symbiotic relationships may be inhibited. Identification and personality integration may be extremely difficult. At a 4th stage of ego development the processes of role-taking and identity formation in the family and beyond it may be disturbed.—L. W. Brandt.

3839. Feinberg, Irwin, & Mercer, Margaret. (St. Elizabeths Hosp., Washington, D.C.) Studies of thought disorder in schizophrenia. *AMA Arch. gen. Psychiat.*, 1960, 2, 504-511.—"Chapman's tests of distractibility and associative intrusion were administered to groups of schizophrenic and organic subjects. The performance of the organic subjects was consistently worse than that of the schizophrenic subjects. The pattern of error score was similar in the two groups. It therefore appears that these tasks do not measure a disturbance of thought which is relatively specific to schizophrenia."—C. T. Morgan.

3840. Garmezy, Norman; Farina, Amerigo, & Rodnick, Eliot H. (Duke U.) Direct study of child-parent interactions: I. The structured situational test. A method for studying family interaction in schizophrenia. *Amer. J. Orthopsychiat.*, 1960, 30, 445-452.—Parents of schizophrenic patients were studied by means of a structured situational test which effectively disguised the purpose of the study and produced data congruent with the clinical and experimental literature. Parents of patients with good premorbid adjustment

showed father ascendant and signs of some overt discord. Parents of patients with poor premorbid adjustment showed mother dominant and striking conflict. Parents of normal control Ss showed a shared pattern of authority and little conflict.—R. E. Perl.

3841. Guertin, W. H., & Rabin, A. I. Misperception of time in schizophrenia. *Psychol. Rep.*, 1960, 7, 57-58.—"Confirmation of Loehlin's short-task and long-task time estimation factors [see 35: 144] was found. However, high variability and lack of expected associations suggested the presence of a functional disability in time estimation for 41 male schizophrenics."—C. H. Ammons.

3842. Haley, Jay. Direct study of child-parent interactions: III. Observation of the family of the schizophrenic. *Amer. J. Orthopsychiat.*, 1960, 30, 460-467.—Observations in families containing a schizophrenic member were analyzed in terms of levels of communication. Since a schizophrenic constantly confuses his levels of communication by qualifying what he says in an incongruent way, the author asserts Bateson's hypothesis that the schizophrenic must have been raised in a learning situation where he was constantly required to respond to messages of different levels which disqualify one another. Family therapy sessions are being taped and some are being filmed. An intensive study of a small number of families is planned.—R. E. Perl.

3843. Hayward, M. L. Schizophrenia and the double bind. *Psychiat. Quart.*, 1960, 34, 89-91.—Bateson's double bind hypothesis, a valuable addition to therapy with schizophrenics, assumes that the mother of a schizophrenic has repeatedly communicated to her child ideas, feelings, and demands that are mutually incompatible. This forces the child to deny his developing personality so that his individuality is lost, and he becomes bound to his mother. A clinical example is described.—D. Prager.

3844. Kimmich, Robert A. Ethnic aspects of schizophrenia in Hawaii. *Psychiatry*, 1960, 23, 97-102.—The 3501 first admissions to the Territorial Mental Hospital (Honolulu) from July 1, 1946 to June 30, 1956 are analyzed statistically. The Caucasian, Hawaiian, and Japanese groups differ in the frequency of schizophrenia. An inverse relationship between schizophrenia and acting out is discussed and related to the high incidence of schizophrenia in the Japanese group. Various cultural factors are related to the etiology of schizophrenia.—C. T. Bever.

3845. Koranyi, E. K., & Lehmann, H. E. (McGill U., Canada) Experimental sleep deprivation in schizophrenic patients. *Arch. gen. Psychiat.*, 1960, 2, 534-544.—"Six chronic psychotic patients volunteered for 100 consecutive hours of wakefulness, during which time some of the biological, psychophysiological, and psychological aspects of this stress situation were studied. An increase in group spirit and cooperation, as well as some increase in stress tolerance, was noted in the first part of the experiment, approximately until the third day, which represented the breaking point. After the third day, progressive deterioration occurred, and five of the six subjects remanifested their acute psychotic picture as it had been observed at the time of their

admission to the hospital. The sixth patient showed a uniform deterioration."—C. T. Morgan.

3846. Sommer, Robert; Dewar, Robert, & Osmond, Humphry. (Weyburn, Canada) **Is there a schizophrenic language?** *Arch. gen. Psychiat.*, 1960, 3, 665-673.—49 schizophrenics, 46 normals, and 23 nonschizophrenics, i.e., mainly depressives and alcoholics were given the Kent-Rosanoff word association test and, in addition, asked to rate the commonness of each response on a 4-point-scale. The associations of the schizophrenics were found to be less common, more variable in retest, and more different from those of other members of their group than the associations given by the normals and the nonschizophrenics. Schizophrenics were not less aware of the degree of commonness of their associations than the other Ss. No evidence was found to the effect that schizophrenics associate to their own associations. The word association test is recommended for use in further studies of the language of mental patients. (24 ref.)—L. W. Brandt.

3847. Walker, Robert G., & Kelley, Francis E. (VA Hosp., Brockton, Mass.) **Predicting the outcome of a schizophrenic episode.** *AMA Arch. gen. Psychiat.*, 1960, 2, 492-503.—A "number of demographic variables and symptoms present at the time of admission of a group of schizophrenic patients were compared with outcome. The principal definitions of outcome utilized were discharged from the hospital within six months of admission (N = 105) and recovery from ratable schizophrenic symptoms within that period (N = 63). Several variables appeared to be related to length of hospital stay, but none to symptom recovery." (19 ref.)—C. T. Morgan.

3848. Weckowicz, T. E. (Saskatchewan Hosp., Weyburn, Canada) **Perception of hidden pictures by schizophrenic patients.** *AMA Arch. gen. Psychiat.*, 1960, 2, 521-527.—"A 'hidden-figure' task was used to test 65 chronic schizophrenics, 34 acute schizophrenics, 41 nonschizophrenic, nonorganic mental patients, 15 organic mental patients, and 21 normals. The schizophrenic patients performed worse than normals and nonorganic mental patients but better than organic patients. When the two groups were matched in intelligence, schizophrenic patients still performed worse than nonschizophrenic, nonorganic patients."—C. T. Morgan.

(See also Abstracts 3398, 3419, 3482, 3494, 3615, 3621, 3652)

#### Affective Disorders

3849. Bonnet, Hélène, & Bonnet, Henri. (Hôpital Psychiatrique, Le Puy, France) **L'endormissement spontané dans les états d'excitation maniaque.** [Spontaneous sleep in states of manic excitation.] *Encephale*, 1960, 49, 305-318.—Brief episodes of somnolence, hardly perceptible and revealed only by a momentary diminution of agitation and logorrhea, are described clinically and sample EEG records are analyzed. Interpretative suggestions are offered.—W. W. Meissner.

3850. Hendin, H. **Suicide in Denmark.** *Psychiat. Quart.*, 1960, 34, 443-460.—The most common precipitating situation for suicide in Denmark is the

loss of dependency gratification through death, separation, divorce, or (most often) through the deterioration of a relationship. Reinforcing the Danish vulnerability to loss of dependency is the great control and suppression of aggression in Denmark. There is also the learned familiarity with the use of personal suffering as a technique for arousing guilt in others and insuring desired gratification. Then there is the frequency of fantasies concerning gratification after death and, finally, the lesser degree of shame in Denmark attached to the act of suicide.—D. Prager.

3851. Hirsh, Joseph. (Albert Einstein Coll. Medicine, NYC) **Methods and fashions of suicide. Part II. Ment. Hyg., NY, 1960, 44, 3-11.**—The second of a series of articles concerned with the psychology of suicide. The current presentation describes in considerable detail the principal methods which are used in committing suicide and the factors which relate to the choice of the specific selection. The writer points out that, "intelligence, knowledge, professional know-how and levels of sophistication have little or nothing to do with the case."—M. A. Seidenfeld.

3852. Porterfield, Austin L., & Gibbs, Jack P. (Texas Christian U.) **Occupational prestige and social mobility of suicides in New Zealand.** *Amer. J. Sociol.*, 1960, 66, 147-152.—In this analysis, victims of suicide in New Zealand came largely from upper-class fathers, suicide rates were significantly higher among persons of high prestige, and victims of suicide at all levels freely changed position between generations on the occupational prestige scales. (5 tables)—R. M. Frumkin.

3853. Stone, Alan A. (Fitzsimons General Hosp., Denver, Colo.) **A syndrome of serious suicidal intent.** *Arch. gen. Psychiat.*, 1960, 3, 331-339.—Prediction is unreliable though important. 7 cases of serious suicidal attempts could not identify with their fathers, had been attached to their mothers, and had consequent difficulties in masculine identification. Suicide was attempted when they did not succeed in "saving" their promiscuous wives. It represents both a masculine assertion and a passive masochistic gratification. The syndrome consists of: "(1) An obsessive compulsive character with latent passive homosexual features; (2) possible symptomatic alcoholism; (3) a history of a relatively poor relationship with father; (4) an interest in a sexually discredited woman . . . [jealousy of] a paranoid quality; (5) a threatened rupture with or rejection by this woman." (35 ref.)—L. W. Brandt.

3854. Yessler, Paul G., Gibbs, James J., & Becker, Herman B. (Walter Reed Army Inst. Research, Washington, D.C.) **On the communication of suicidal ideas: I. Some sociological and behavioral considerations.** *Arch. gen. Psychiat.*, 1960, 3, 612-631.—272 suicides and 104 attempts by military men were investigated in relation to previous communications of the intention. No significant difference in the communication of suicidal thoughts was found between the 2 groups. More communications came from enlisted men than from officers, from poorly than from higher educated men, from men with many dependents, from single than from married men, and from men with histories of pre-

vicious suicide attempts or threats. More suicides and serious attempts left notes than other attempts.—L. W. Brandt.

#### Physiological Correlates

3855. de Almeida Relvas, Maria E. S. (U. Lisbon) *Les amino-aciduries des maladies mentales: I. Essais préliminaires.* [Amino-aciduria in mental illness: I. Preliminary study.] *Encephale*, 1960, 49, 279-289.—The aminoacid content of mental patients is determined by electrophoresis and electrochromatographic separation. Significant differences from normal controls were found in acute psychotics and schizophrenics for all amino-acids tested; epileptics showed significant differences in  $\gamma$ -amino-n-butyric acid, tyrosine, valine and phenylalanine. No significant differences were discovered in manic-depressives and alcoholics. (25 ref.)—W. W. Meissner.

3856. Sévery, Julien. (Hôpital Stuienberg, Anvers, Belgium) *Le pincement inférieur de la tension différentielle: Un indice de tension psychique.* [Diastolic blood pressure: An index of psychic tension.] *Encephale*, 1960, 49, 329-331.—Arterial hypertension is connected with nervous excitation. Stress produces a hypersecretion of vasopressin, which raises the blood pressure. The relationship is demonstrated in 6 patients suffering from anxiety. The phenomenon is not constant and does not appear in all mental patients, but it can serve as an objective sign of the evolution of psychic disturbance.—W. W. Meissner.

#### PSYCHONEUROSES

3857. Binswanger, L., Jr. *Modalità della comunicazione verbale e sua limitazione all'espressione simbolica presentate in un ossessivo diciassettenne.* [Modalities and limitations of verbal communications and symbolic expression in a seventeen year old obsessive.] *Arch. Psicol. Neurol. Psychiat.*, 1960, 21, 357-369.—Considerations of anthropoanalytical and psychoanalytical viewpoints in psychotherapy of obsessive characters.—L. L'Abate.

3858. Coolidge, John C., Willer, Mary Lou; Tessman, Ellen, & Waldfogel, Samuel. (Judge Baker, Guidance Center, Boston, Mass.) *School phobia in adolescence: A manifestation of severe character disturbance.* *Amer. J. Orthopsychiat.*, 1960, 30, 599-607.—4 cases of school phobia in adolescence are described to illustrate the prolonged infantilization of the child that had been going on and the mutual reinforcement of the interdependent relationship between the child and parents. In addition to psychotherapy with child and parents, intervention at the reality level is required. Progress is usually slow because of the strong investment of the parents and child in perpetuating their neurotic relationship.—R. E. Perl.

3859. Edwards, Robert V. (North West Mental Health Center, Crookston, Minn.) *A case report of gasoline sniffing.* *Amer. J. Psychiat.*, 1960, 117, 555-557.—A case report is described of a 17-year-old male patient who had sniffed gasoline vapors compulsively from the age of 6. Comparisons are made with 3 other cases reported in the litera-

ture. It is concluded that gasoline sniffing may occur in a child with the psychodynamics of a manic.—N. H. Pronko.

3860. Fernandez-Zoila, Adolfo. (Paris, France) *Introduction à une étude des nevroses "existentielles": Approche psychopathologique de la thématique du film de Marcel Carné, "Les Tricheurs."* [Introduction to a study of "existential" neuroses: A psychopathological approach to the theme of the movie by Marcel Carné, "The Cheaters."] *Evolut. Psychiat.*, 1960, 25, 433-459.—Psychological and behavioral similarities between a neurotic 23-year old female who attempted suicide and characters in a movie *The Cheaters* are presented and analyzed psychoanalytically. For example, the neurotic is unable to organize the present in relationship to the past and future. Thus the individual adopts a neurotic pattern which becomes more concerned with the self. His activities, because they are unrelated to time perspective, are repetitive and goalless, and therefore doomed to failure and frustration. Concomitantly, the social milieu becomes more restricted and hostility may be projected against society or introjected against the self.—L. A. Ostlund.

3861. Galdston, Iago. (2 East 103 St., NYC) *The gambler and his love.* *Amer. J. Psychiat.*, 1960, 117, 553-555.—The underlying psychodynamics of a patient addicted to gambling is reconstructed from data gathered from the patient's own life experiences.—N. H. Pronko.

3862. Lesser, Leonard L., Ashenden, Barbara J., Debuskey, Matthew, & Eisenberg, Leon. *Anorexia nervosa in children.* *Amer. J. Orthopsychiat.*, 1960, 30, 572-580.—15 cases of anorexia nervosa in preadolescent and adolescent girls were studied. In about 40% of the cases the anorexia began with a self-enforced diet undertaken because of self-consciousness about height or weight. In another 40% it developed in a competitive situation with which the patient could not cope. For the 11 hospitalized patients, management in the hospital was very difficult. At follow-up, 6 cases achieved a fair adjustment and 7 a good one. There were no deaths. Hysterical personality traits augur a better prognosis than predominantly schizoid or compulsive traits.—R. E. Perl.

3863. Modlin, Herbert C. *The trauma in "traumatic neurosis."* *Bull. Menninger Clin.*, 1960, 24, 49-56.—The psychiatric consequences of accidents are becoming increasingly important as a basis for personal injury suits. The law, if not medicine, recognizes "traumatic neurosis" as an entity. 40 cases with such a preliminary diagnosis are being studied in detail by the Menninger Clinic. The syndrome of anxiety, chronic muscular tension, repetitive frightening dreams, irritability, and withdrawal may be a "fundamental, nonspecific, organismic reaction to severe external stress of a frightening or life-threatening kind." 2 sets of circumstances are identified as commonly precipitative to a traumatic neurosis syndrome: (a) occurs suddenly without forewarning in familiar and presumably safe surroundings, (b) occurs with brief forewarning allowing for emergency mobilization but with no possibility of effective action.—W. A. Varvel.

3864. Schraauwers, C. J. M. **Diagnostic différentiel entre jactatio et tic.** [Differential diagnosis in jactatio and tic.] *Acta paedopsychiat.*, 1960, 27, 225-238.—Jactatio is a motor "gestalt" and can be understood as the child's specific relation to his world. Tic is an arrhythmic movement without agreeable value and is absent during sleep. Tic is involuntary, jactatio willed and incompatible with locomotion. The latter's formal and temporal structure is essentially cyclical. The child withdraws into the experience of its own body, time structure disappears, and under certain conditions he glides into the sleeping states.—G. Rubin-Rabson.

## PSYCHOSOMATICS

3865. LeShan, Lawrence. (Inst. Applied Biology, NYC) **Some methodological problems in the study of the psychosomatic aspects of cancer.** *J. gen. Psychol.*, 1960, 63, 309-317.—Special problems in research into the relationships between personality and neoplastic disease are discussed under the headings: experimental and control groups, problems in the investigation of the psychological data, and other special problems.—*Author abstract.*

3866. Pinelli, P. **Reperti elettroencefalografici di inibizione encefalica nell' isterismo e loro significato.** [Electroencephalographic signs of encephalic inhibition in hysteria and their significance.] *Arch. Psicol. Neurol. Psychiat.*, 1960, 21, 423-428.—A depression of the ascending activating reticular system may be characteristic of functional encephalic disturbance in hysteria.—L. L'Abate.

## EDUCATIONAL PSYCHOLOGY

3867. ———. **Beayot pedagogiyot-psikhologiyot.** [Pedagogical-psychological problems.] *Urim*, 1959-60, 17, 322-456.—A special issue of 31 papers deals with the position and value of psychology in education—psychology as a help to teachers, as a factor in guidance, in therapy, in mental hygiene, etc. Examples of topics are: ways to understand children, the child's basic needs, individual and group psychotherapy, psychology in teacher training, diagnostic value of children's drawings, psychology in social work, and psychology in physical education.—H. Ormian.

3868. Hunt, John H. (SUCE, Plattsburgh, N.Y.) **Developing self-discipline in child is modern elementary teacher's goal.** *NY State Educ.*, 1959, 47(2), 34-35, 53.—Clarifying one objective of elementary education as "self-discipline or self-control," emphasis is placed on helping pupils develop self-control with full recognition of the fact that some external control is necessary as children move slowly toward self-discipline. A list of 12 principles is given.—L. D. Summers.

3869. Morse, Horace T., & Dressel, Paul L. (Eds.) **General education for personal maturity.** Dubuque, Ia.: William C. Brown, 1960. x, 244 p. \$4.50.—1st of 7 volumes dealing with the impact of general education courses on personal development, home and family living, and vocational adjustment. Topics include: "The Quest for Maturity," "Maturity in Personal and Social Adjustment," "Maturity in Preparation for Marriage and Family Liv-

ing," "Maturity in the Selection of a Vocation." Each of the 3 parts contains a preview by the editor(s), several chapters describing actual programs of study, and a chapter assessing developments in that area. Chapter 18 presents an overall evaluation of the problem of education for maturity and the evolution, departmental affiliations and titles, course content, teaching method(s), and evaluation of adjustment-type courses. Scattered footnote references.—C. H. Miley.

3870. Oinonen, P. (U. Jyväskylä, Finland) **Huono käsiala psykologisena ongelmana.** [Poor handwriting as a psychological problem.] *Acta Acad. Paedag. Jyväskyläensis*, 1960, No. 21, 170 p.—Handwriting specimens were collected from 122 primary school children. Quality of penmanship was rated by 6 judges. Correlations among the ratings ranged from +.78 to +.85. Judgments obtained over a period of 3 years correlated with the original ratings approximately +.60. A factor analysis revealed that good-poor handwriting is related to fine, rather than gross, motor functions. Intelligence correlated +.38 with quality of handwriting. Handwriting together with intelligence correlated +.70 with success in school. Poor penmen, in contrast to good penmen, were rated restless, tense, tarrying, and unable to concentrate. Rorschach indicators of affectivity, lack of control, lack of sense of reality, introversion, motor inhibition, tension, anxiety, and uncertainty characterized the poor penmen. Good handwriters were rated to be more popular than the poor handwriters. Illness and family problems were prevalent in the backgrounds of the poor penmen. (236 ref., English summary)—N. M. Chansky.

(See also Abstracts 2975, 3263)

## SCHOOL &amp; CLASSROOM LEARNING

3871. Bartlett, Claude J., Ronning, Royce R., & Hurst, John G. **A study of classroom evaluation techniques with special reference to application of knowledge.** *J. educ. Psychol.*, 1960, 51, 152-158.—Data were collected from 100 students enrolled in educational psychology, and 30 variables were intercorrelated and the factors analyzed. Of 7 factors extracted, 3 appeared of special importance: a factor of general achievement ability, which indicated that performance on case study tests was related to general ability to achieve; a factor of applicational ability, which indicated that case study tests may also be related to the ability to apply knowledge and included such favorable things as a good attitude toward teaching; a factor of knowledge of facts and principles that may be desirable in some situations but is not necessarily related to desirable qualities for a future teacher.—W. E. Hall.

3872. Fahey, George L., & Ball, Joe M. **Objective evaluation of a program in general education.** *J. educ. Psychol.*, 1960, 51, 144-151.—The purpose of this study was to compare the effects of a general education to a conventional program of education. Freshmen were permitted to volunteer in 1, 2, or 3 of 4 core-curriculum courses. The remaining freshmen constituted the control group. At the end of the sophomore and senior years the Graduate Record Examinations were given. Quality point averages were computed at the end of the freshman year and at graduation. In 17 of 22 meas-



urements the differences favored the experimental group at the 5% level. 5 differences favored the control group but were nonsignificant. There were no differences in critical thinking.—*W. E. Hall.*

3873. Galanter, Eugene. (U. Pennsylvania) **Two models of a student.** *Teachers Coll. Rec.*, 1960, 62, 187-194.—Teaching machines or auto-instructional devices can teach creative solutions of problems if programs are developed for the purpose. This requires that the model of our student be an information processing device rather than merely an information retrieving device.—*H. K. Moore.*

3874. Lana, R. E., & King, D. J. (American U.) **Learning factors as determiners of pretest sensitization.** *J. appl. Psychol.*, 1960, 44, 189-191.—70 S in 4 general psychology sections were randomly assigned to different treatment conditions. After being read a summary of the story of a film, 2 groups were asked to summarize it. 1 group viewed the film 12 days later. 1 group had neither the summarizing experience nor saw the film. All 4 groups had the posttest 12 days after being read the story. A pretest sensitization operating above the effect of the treatment condition was shown; however, it presumes some degree of learning in the pretest.—*J. W. Russell.*

3875. Loree, M. Ray, & Koch, Margaret B. **Use of verbal reinforcement in developing group discussion skills.** *J. educ. Psychol.*, 1960, 51, 164-168.—24 groups of 4 students each, matched on academic grade point average, were assigned discussion topics. All discussions were taped and transcribed. Agreement on final discussions constituted the dependent variable. Between initial and final discussions the control group had no training, whereas the practice group participated in a general discussion about its performance. The reinforced groups had tapes of their discussions played back in order to stimulate recall and to permit immediate positive reinforcement. The reinforced groups showed considerable improvement. Practice without reward conditions had no significant influence.—*W. E. Hall.*

3876. Pierson, George A., & Grant, Claude W. (Queens Coll., Brooklyn) **The road ahead for the school counselor.** *Personnel guid. J.*, 1959, 38, 207-210.—The guidance movement should be recognized as an effort to emphasize the importance of individualized education. A genuine profession of school counseling should be developed.—*S. Kavruck.*

3877. Stratton, A. J., Jr. (Western Psychiatric Inst. & Clinic, Pittsburgh, Pa.) **An objective evaluation of a group health education program for tuberculosis patients.** *Amer. Rev. respir. Dis.*, 1960, 82, 709-713.—50 tuberculosis patients were tested before and after a group health education program consisting of films, lectures, and discussion. The "testing revealed highly significant increases in knowledge about tuberculosis on all tests. There was a statistically significant decrease in patients' manifest anxiety level."—*C. T. Morgan.*

3878. Wallen, Norman E., & Vowles, Robert O. **The effect of intraclass ability grouping on arithmetic achievement in the sixth grade.** *J. educ. Psychol.*, 1960, 51, 159-163.—The purpose of this study was to determine the outcomes of intraclass ability grouping vs. nongrouping procedures. 4

classes of 6th-grade students were matched on arithmetic achievement and taught by 4 different teachers. Each teacher taught his class for one semester with grouping and for the other semester with nongrouping. Achievement tests of equivalent forms were given at the end of each semester. The analysis of covariance yielded the following findings: no significant difference was found between grouping and nongrouping procedures. Significant differences were found between students and between teachers, one teacher achieving a considerably higher student performance than the others.—*W. E. Hall.*

3879. Zinchenko, P. I. (Inst. Foreign Languages, Kharkov, USSR) **Formirovanie priemov logicheskogo zapominaniya u shkolnikov I klassa.** [Formation of methods of logical memorization in first graders.] *Dokl. Akad. Pedagog. Nauk RSFSR*, 1959, No. 6, 63-66.—Can classification be used as a mnemonic aid by pupils of 1st grade? This study shows: (a) 1st graders cannot use classification spontaneously. (b) They can be taught to make use of classification. (c) Classification and memorizing remain 2 separate acts of the learning process; first Ss have to classify and then to learn. A complete subordination of classification to the learning process necessitates a higher development of mental abilities.—*A. Cuk.*

(See also Abstract 2952)

#### LEARNING & INSTRUCTIONAL AIDS

3880. Coulson, John E., & Silberman, Harry F. **Effects of three variables in a teaching machine.** *J. educ. Psychol.*, 1960, 51, 135-144.—8 groups of 10 junior college students took part. The main effects studied were: multiple choice response vs. constructed (fill-in) response, many items (small step) vs. few items (large step), and nonbranching (all item) vs. branching (removal of correct item on 1st and sequential trials). 104 students for a control group (not exposed to material) were drawn from the same classes as the experimental group. All Ss were tested immediately after training and again 3 weeks later. Experimental Ss gained significantly as compared to untaught controls. Multiple choice mode took less time than constructed response. Small item steps required more time but led to significantly higher scores. Branching required less time but tended to lead to less learning (not significant).—*W. E. Hall.*

3881. Gordon, Morton J. (U. Hawaii, Honolulu) **Third grade television-classroom articulation program.** *J. speech hear. Dis.*, 1960, 25, 398-404.—197 pupils from 20 different 3rd-grade classrooms were given a speech improvement course employing a combination of television and instruction. The experimental group demonstrated considerable improvement over a 9-week period and demonstrated fewer errors than a control group which received no specific speech improvement training. Television may prove a valuable supplementary tool.—*M. F. Palmer.*

3882. Nickols, J. E., Jr. **Ancillary projective materials for demonstration and research.** *Percept. mot. Skills.*, 1960, 11, 54.—Five 3"×5" achromatic photographs of oil paint blots may be used for various research and demonstration purposes.—*C. H. Ammons.*

3883. Rothkopf, Ernst R. (Bell Telephone Lab., Murray Hill, N.J.) **A do-it-yourself kit for programmed instruction.** *Teachers Coll. Rec.*, 1960, 62, 195-201.—Programs for teaching machines should be written by the teachers. Suggestions for procedure are given.—H. K. Moore.

3884. Siegel, Laurence. (Miami U., Oxford, O.) **The instructional gestalt: A conceptual framework.** *Teachers Coll. Rec.*, 1960, 62, 202-213.—After presenting results of a study at Miami University which showed equal achievement of TV and small-size classes, the author criticizes some of the research on this problem for neglecting the "instructional gestalt" (the full multiplicity and patterning of factors entering into the teaching-learning situation), for treating unlike classroom environments as alike, and for restricting the criterion to the acquisition of factual knowledge.—H. K. Moore.

3885. Stoluvrow, Lawrence M. (U. Illinois) **Teaching machines and special education.** *Educ. psychol. Measmt.*, 1960, 20, 429-448.—The history of teaching machines is reviewed and 8 properties or functions are described: presentation, response, comparator, feed-back, programming, pacing, collator, and selective. Examples of some controlled classroom research studies now possible with teaching machines are given. Teaching machines are classified into nonadaptive, partially adaptive, and adaptive. Several research results are reported and the implications of the machines discussed briefly.—W. Coleman.

3886. Ward, Clyde H. (U. Pennsylvania) **An electronic aid for teaching interviewing techniques.** *Arch. gen. Psychiat.*, 1960, 3, 357-358.—By means of a hearing-aid-like device a student interviewer receives instructions from a supervisor who watches the interview through a 1-way mirror and listens over a sound pick-up system. The interviewee cannot hear the instructions.—L. W. Brandt.

#### INTERESTS, ATTITUDES, & ADJUSTMENT

3887. Abhilashi, H. C. **Vocational interests of undergraduates.** *Vidya Bhawan Stud.*, 1956-57, 5, 59-64.—A questionnaire was administered to 250 undergraduates. The most frequently chosen vocation was engineering followed by medicine and teaching. Data were also collected regarding family status, socioeconomic conditions, liking and disliking for personalities, and activities and interest in getting vocational information. For 19.6% vocational choice was influenced by parents' professions.—U. Pareek.

3888. Andrew, D. C., & Stroup, F. **Plans of Arkansas high school seniors.** *Personnel guid. J.*, 1960, 39, 300-302.—Post-high school plans and related factors for 12,746 students are presented.—S. Kavruck.

3889. Chander, Ram. **General reading interests of high school students.** *Vidya Bhawan Stud.*, 1956-57, 5, 16-33.—A study of 300 students showed interest in reading material available in Hindi only. Few students read newspapers daily, and still fewer were interested in magazine reading. Stories were most liked, followed by novels, religious themes,

patriotic themes, drama, and poetry. Some recommendations are given.—U. Pareek.

3890. Gladstein, Gerald A. (U. Minnesota) **Study behavior of gifted stereotype and non-stereotype college students.** *Personnel guid. J.*, 1960, 38, 470-474.—Significant differences were found between study activities of 24 stereotype and 24 nonstereotype gifted students. Study behavior was similar to that expected from personality structure. (19-item bibliogr.)—S. Kavruck.

3891. Goldsen, Rose K., Rosenberg, Morris; Williams, Robin M., Jr., & Suchman, Edward A. **What college students think.** Princeton, N. J.: D. Van Nostrand, 1960. xiv, 240 p. \$5.95.—A survey of 4585 male college Ss in 11 universities throughout the United States. Also included were 245 female college Ss at Cornell. Interviews covered such subjects as: college education; careers; fraternity system; relations with the opposite sex; political, economic and international views; and religious beliefs. (57 tables, 24 appendices)—D. G. Brown.

3892. Gustav, A. **Persistence of students' misconceptions over an eleven-year period.** *Psychol. Rep.*, 1960, 7, 150.—Content analysis of 25 true-false items, given to 8 introductory psychology classes beginning in 1949, is described.—C. H. Ammons.

3893. Heilbrun, Alfred B., Jr. (State U. Iowa) **Personality differences between adjusted and maladjusted college students.** *J. appl. Psychol.*, 1960, 44, 341-346.—A "maladjusted" group (100 college Ss) were compared to a sample of the university student body (206 Ss) and to the adjusted counseling group (100 Ss) using an adjective check list (Gough) on which each S described himself. The ACL results were compared with psychologists' judgments and showed considerable agreement. Sex differences were noted and related to a possible social desirability factor.—J. W. Russell.

3894. Hoffman, Paul J. (U. Oregon) **Social acquiescence and "education."** *Educ. psychol. Measmt.*, 1960, 20, 769-776.—No group changes in acquiescence were noted as a result of a semester of college work, but there were significant individual shifts in both directions. Students high in acquiescence appeared "less able to develop subject matter proficiency in introductory psychology, although they are not significantly different from low acquiescent students either in ability or in initial achievement level." The Bass Scale of Social Acquiescence was administered to 157 students in introductory psychology.—W. Coleman.

3895. Jones, Mary Cover. **A comparison of the attitudes and interests of ninth-grade students over two decades.** *J. educ. Psychol.*, 1960, 51, 175-186.—A comparison of the activities, interests, and attitudes of 9th-grade classes in the same school in 1935, 1953, and 1959. The samples are similar in age, IQ, and social status. The more recent generations indicate greater maturity of heterosexual interests, more serious purpose, and more tolerant attitude toward social issues. Currently, girls' interests have expanded more in sports, and boys reject more occupations.—W. E. Hall.

3896. Kalish, R. A., & Bartos, O. J. **Survey of student attitudes towards campus activities at**

the University of Hawaii. *Personnel guid. J.*, 1960, 39, 292-299.—"Expected relationships between academic achievement and aptitude, on the one hand, and participation and leadership, on the other, were not found." Interest in campus activities and information regarding such activities are related to leadership and participation. (15-item bibliogr.)—S. Kavruck.

3897. Rettig, Salomon, & Pasamanick, Benjamin. (Ohio State U.) Moral codes of American and Korean college students. *J. soc. Psychol.*, 1959, 50, 65-73.—Ohio State University and Seoul University students "responded in terms of 'rightness' or 'wrongness' on a scale ranging from 1 to 10" to each of "50 morally prohibited activities." The "Koreans, who are predominantly atheists, judged more severely on all moral issues" than did the Americans, "except for the religious items."—J. C. Franklin.

3898. Singh, Dalgit. Vocation interests of the high school boys. *Vidya Bhawan Stud.*, 1955-56, 4, 36-44.—Results with 300 high school students showed the order of interests to be engineering, medicine, business, and trading. Hierarchies of interest were found to be based on interests, ability, and needs of society.—U. Pareek.

3899. Singh, Dhan Raj. Change of attitudes among the children in basic schools. *Vidya Bhawan Stud.*, 1956-57, 5, 95-104.—65 pupils from 2 basic schools (in Class VI, age range 11-13) were given a total of 15 attitude tests using maze completion, picture completion, ranking, and multiple choice. The pupils in basic schools had more positive attitudes than those of the traditional schools toward constructiveness, truthfulness, social and cooperative living, and dignity of labor. The traditional school pupils were found to have better attitudes toward leadership, responsibility, and emotional adjustment. The differences were not significant.—U. Pareek.

3900. Touzard, H. Étude de l'attitude des stagiaires F.P.A. à l'égard de l'examen psychotechnique. [Study of the attitudes of trainees from adult training centers towards psychological examinations.] *Bull. Cent. Etud. Rech. Psychotech.*, 1960, 9, 193-203.—75% of 200 trainees consider that the examination is useful and understand its purpose. Educational level and prior professional training are some of the factors determining this attitude. Ss who could not understand the object of the examination were hostile towards it.—V. Sanua.

3901. Watts, Hugh G., & Davis, John M. Attitudes toward psychiatry. *Ment. Hyg.*, NY, 1960, 44, 74-78.—A random sample of 140 college undergraduates were interviewed by the investigators in order to determine their attitude toward psychiatric and other forms of counseling available at the college. The evidence indicated that these students did not perceive the psychiatrist as being able to help them resolve their personal problems. They expressed ambivalence toward any form of counseling in a concrete relationship although they could see some values on a purely abstract basis. Most students felt they would use the university psychiatrist only as a last resort. As a probable outcome of their fears and apprehensions, most students appeared to be unaware that psychiatric services were

available for their use. This appears to be related to their own resistance to such aid.—M. A. Seidenfeld.

3902. Wolff, Ethel M. (Temple U.) A comparative study of well-adjusted and poorly-adjusted boys ranging from six through twelve years of age with respect to standardized tests, interviews, and school records. *Dissertation Abstr.*, 1960, 21, 1633.—Abstract.

(See also Abstracts 3342, 3858)

#### SPECIAL EDUCATION

3903. Actis, Donald F. (Alleghany Ave. Elementary School, Lindenhurst, N.Y.) Stimulating mentally retarded class. *NY State Educ.*, 1960, 47(6), 15, 52.—Describes the facilities, programs, and inspired teaching in an elementary-level special class for the educable mentally handicapped.—L. D. Summers, Jr.

3904. Alprin, S. I. (New Jersey State Dept. Education) The effect of organizational patterns on programs for trainable children in New Jersey's public schools. *Amer. J. ment. Defic.*, 1960, 65, 376-380.—A consideration of: the multi-unit center versus the 1-room school; the relationship of organizational pattern to curriculum development, supervision, and parent education; and the stability of the programs.—V. Staudt-Sexton.

3905. Goldworth, Mary. (Sunnyvale, Calif.) Effects of an elementary school fast-learner program on children's social relationships. *Except. Child.*, 1959, 26, 59-63.—An investigation of the effect of special educational grouping on social relationships. Fast-learning groups were compared with control groups on variables thought to be affected by special grouping; e.g., change in acceptance of each other as friends, in acceptance of fast learners as friends, in fast learner's acceptance of classmates as friends, in cohesion within groups, and in change of degree of fast-learner subgroup preferences within classroom groups. Results of the sociometric survey indicated that the fast-learner program had a limiting effect on the number of classmates accepted as best friends but had no effect on quality of acceptance of classmates as best friends, on group cohesions, or on subgroup preferences.—A. Barclay.

3906. Hildreth, Gertrude. (Brooklyn Coll.) How Russian children learn to read. *Read. Teacher*, 1959, 13, 134-143.—A brief, general review is made of the Russian language and alphabet; a primer for teaching reading and the vocabulary used; and methods of instruction in reading, writing, and spelling. The reading instruction methods are compared with those used in the United States. Russian reading methods are considered well suited to the written language for teaching reading mechanics and comprehension.—C. Wurtz.

3907. Maroon, James D. (Haverstraw High School, N.Y.) New plea made for mandatory classes for trainable mentally retarded children. *NY State Educ.*, 1960, 47(6), 16-17.—Reviewing statistics regarding such classes and the "human values" arguing for such programs, this high school teacher deplores the slow progress in developing public school classes for trainable mentally handi-

capped. He urges action towards mandatory legislation requiring schools to provide for them.—*L. D. Summers, Jr.*

3908. Phillips, E. Lakin, & Haring, Norris G. (National Orthopedic & Rehabilitation Hosp., Arlington, Va.) **Results from special techniques for teaching emotionally disturbed children.** *Except. Child.*, 1959, 26, 64-67.—Providing clearer and more structured classroom procedures for work assignments, seating and movement assignments, play and recreation assignments, and social-emotional conduct expectations improved the educational and emotional status of the experimental groups. Clear directions, firm expectations, and consistent follow-through are apparently necessary for the development of emotionally disturbed children.—*A. Barclay.*

3909. Raygor, Alton L. (U. Minnesota) **College reading improvement and personality change.** *J. counsel. Psychol.*, 1959, 6, 211-217.—"Personality inventories, questionnaires, and measures of reading ability . . . [were] administered before and after a seven-week course in college reading improvement to a group of 88 Ss. A marked increase in reading ability was determined. Personality change was in the direction of decreased anxiety and increased emotional stability and self-confidence, and was not related to the perceived importance of reading or to increased reading skill.—*M. M. Reece.*

3910. Sastre, Pablo O. (Inst. Nacional Psicología Aplicada Psicotecnia de Alicante, Spain) **Técnica para la exploración del "lenguaje gráfico."** [Technique for the exploration of "graphic speech."] *Rev. psicol. gen. apl., Madrid*, 1959, 14, 151-154.—Concerned with setting up a standardized procedure for studying drawing behavior as an indicator of graphic movement, it is suggested that the procedure of (a) free drawing, (b) suggested drawing, (c) drawing of an object in the environment, and (d) illustrating a story which is told be followed. Each picture is drawn on a paper which is divided into quarters. The procedure is illustrated with student and nonstudent groups.—*B. S. Aaronson.*

3911. Steer, M. D., & Drexler, Hazel G. (Purdue U.) **Predicting later articulation ability from kindergarten tests.** *J. speech hear. Dis.*, 1960, 25, 391-397.—Tests of intelligence, social maturity, and articulatory ability were administered to 93 kindergarten children. 54 of these Ss participated in a 12-week speech improvement program, at the conclusion of which articulation tests were again administered. 5 years later the articulation ability of the same children was retested. Certain variables measured at kindergarten level have predictive value. These are the total number of errors in all positions within words, errors in the final position, errors of omission in the final position, and errors on the (f), (1) consonant group. Amount of improvement during the 12-week period also appears to be highly significant. Intelligence and social maturity appeared to be unrelated to articulatory ability 5 years later.—*M. F. Palmer.*

3912. Traxler, Arthur E. (Educational Records Bureau, NYC) **Recent findings and trends in research on reading.** *Read. Teacher*, 1959, 13, 90-99.—The research in reading published in 1953-57 is reviewed. Findings are grouped under the following

topics: readiness, interests, reading and other subjects, reading and television, vocabulary, phonics, tests in a reading program, speed of reading, controlled reading, eye movements, visual defects, auditory and speech defects, dominance and reversals, reading and personality qualities, reading achievement, typography, diagnosis, remedial and corrective work, developmental reading, adult reading, readability, reading—today and yesterday, needed research. (93 ref.)—*C. Wurtz.*

3913. Tutto, D. N. **Maladjustment among adolescents.** *Vidya Bhawan Stud.*, 1956-57, 5, 105-111.—Study of a group of 100 16-year-old maladjusted students showed that 90% had behavioral and moral disorders, and the majority of these students were truants. Case studies of 5 seriously maladjusted students showed that they came from poor homes, had no regard for their teachers, were backward, and were not interested in work. A few details of the cases and suggestions for their improvement are given.—*U. Pareek.*

3914. Williams, Meta F. (Greenburgh School District 8, Hartsdale, N.Y.) **"Opposites attract—right?"** *NY State Educ.*, 1960, 47(6), 22-23.—A brief, anecdotal case history dealing with one teacher's handling of an "unreachable" child in a regular classroom. Its success is symbolized by the student's statement which is the title.—*L. D. Summers, Jr.*

3915. Witty, Paul; Stolarz, Theodore, & Cooper, William. (Northwestern U.) **The improvement of reading rate and comprehension in adults.** *Read. Teacher*, 1959, 13, 121-128.—The trends, devices, and some major findings in research on improvement of reading speed and comprehension with adults are reviewed. A program of reading improvement for adults is described. Men in a one-year traffic police administration training program were studied in the reading improvement program. N=224 men, mean age 35, average length of police service over 10 years, and mean AGCT score of 115. Iowa Silent Reading Test scores show average percentile rank increase (on 13th grade norms) of 36 points, significant at the .01 level. Subtest scores show greatest average gain in rate (48 percentile points) and least in comprehension (6 percentile points). Results indicate the effectiveness of a program that does not stress speed as the primary goal.—*C. Wurtz.*

(See also Abstract 3746)

#### EDUCATIONAL GUIDANCE

3916. Anderson, A. W. **Personality traits of Western Australian University entrants.** *Aust. J. Psychol.*, 1960, 12, 4-9.—"Students entering the University of Western Australia in 1958 and 1959 were tested on the Sixteen Personality Factor Questionnaire (Form A). This article reports the raw scores obtained by entrant students on the sub-scales of the 16PF Test and compares them by sex, course and, in a minor way, by age."—*P. E. Lichtenstein.*

3917. Arbuckle, Dugald S. (Boston U.) **Counseling: Philosophy or science.** *Personnel guid. J.*, 1960, 39, 11-14.—Aspects of counseling which might be associated with the more scientific approach are presented. These include predictions based on evi-



dence and facts, the traditional case study approach, and individual assessment.—S. Kavruck.

3918. Baymur, Feriha B., & Patterson, C. H. (Ministry Education, Ankara, Turkey) **A comparison of three methods of assisting underachieving high school students.** *J. counsel. Psychol.*, 1960, 7, 83-89.—32 high school students were selected as underachievers and divided into 4 equal matched groups. The experiment utilized conditions of individual counseling, group counseling, and "a one-session motivational experience." Pre- and post-experimental measures of personal adjustment, study habits and attitudes, and academic achievement were obtained for the 3 experimental groups and the control group. The results are interpreted as indicating "that the four groups did not differ significantly on any of the criteria." Comparison of the counseled groups with the noncounseled groups showed differences in adjustment-score change and grade-point average. Limitations of the study are noted.—M. M. Reece.

3919. Berdie, Ralph F. (U. Minnesota) **The counselor and his manpower responsibilities.** *Personnel guid. J.*, 1960, 38, 458-463.—The counselor has fulfilled his manpower role when the counselee is provided with help that permits self-understanding of his abilities, interests, personality, and educational and occupational opportunities, and also permits a solution best fitted to the individual.—S. Kavruck.

3920. Berdie, Ralph F. (U. Minnesota) **Strong Vocational Interest Blank Scores of high school seniors and their later occupational entry.** *J. appl. Psychol.*, 1960, 44, 161-165.—Three groups of University graduates were compared, graduates from medicine, law, and accounting, on the basis of SVIB scores obtained in Grade 12. The scores of the three groups were significantly different from one another, and pattern analysis of each student's interest profile revealed that the three groups had different profile patternings as well as different scores on the individual scales. These differences suggest that careful use of the SVIB is justified with high school seniors.—Author summary.

3921. Bixenstine, V. Edwin. (Kent State U.) **Student attitudes and college counseling.** *J. counsel. Psychol.*, 1959, 6, 280-283.—The development of a psychological counseling program in a small college is described. "The separation of the counseling office from other administrative offices and the fact that the psychologist was not a member of the teaching staff proved to be of considerable value." Students should be granted a voice in the planning and maintenance of such a program.—M. M. Reece.

3922. Bordua, David J. **Educational aspirations and parental stress on college.** *Soc. Forces*, 1960, 38, 262-269.—Questionnaire data from over 1200 urban New England students in Grades 9-12 reveal that sex, religious affiliation, and socioeconomic status as measured by father's occupation are all related to college plans. These relationships are mutually independent. Females "are more likely to be college oriented at all socioeconomic levels given medium to high levels of parental stress." A "college plans index" is higher for Jews than for Protestants or Catholics but at a reduced level when controlled for degree of parental stress.—A. R. Howard.

3923. Brown, Frederick G. (U. Missouri) **Identifying college dropouts with the Minnesota Counseling Inventory.** *Personnel guid. J.*, 1960, 39, 280-282.—Male dropouts tended to be irresponsible and nonconforming; female dropouts were withdrawn and depressed.—S. Kavruck.

3924. Cottle, W. C., & Downie, N. M. (U. Kansas) **Procedures and preparation for counseling.** Englewood Cliffs, N.J.: Prentice-Hall, 1960. ix, 330 p. \$8.00.—"The purpose of this book is to draw together from a number of sources the kind of information and the type of preparation the counselor will need prior to a series of counseling interviews. It is not intended to be a text in counseling theory as such." 12 chapters include: "Preparation for Counseling," "Observation for Counseling Purposes," "Records and Personal Documents," "The Initial Interview," "Organizing an Educational-Vocational Case Study for a Client," "Statistics Used to Describe Groups and Individuals," "Application of Statistics," "The Selection and Use of Standardized Tests," "Evaluation of Abilities and Aptitudes," "Interests," "Evaluation of Other Personal Data," and "The Counselor's Research." Material is illustrated with charts, graphs, tables, bibliographies, and hypothetical cases.—S. Kavruck.

3925. Curran, Charles A. (Loyola U., Chicago) **Some ethical and scientific values in the counseling psychotherapeutic process.** *Personnel guid. J.*, 1960, 39, 15-20.—A concept of humility defined as the "reasonable pursuit of one's own excellence" may serve as a core therapeutic concept and basic value scheme.—S. Kavruck.

3926. Esper, George. (Sauquoit Valley Central School, N.Y.) **If you have a minute.** *NY State Educ.*, 1959, 47(2), 7.—A school psychologist briefly discusses role-playing, as a means of reducing obstacles to communication and for handling personal problems, with junior high school students.—L. D. Summers.

3927. Farwell, Gail F., & Peters, Herman J. (Eds.) **Guidance readings for counselors.** Chicago, Ill.: Rand McNally, 1960. x, 691 p.—84 readings from recent periodicals selected to "provide counselor educators, counselors-in-preparation, and counselors-in-service . . . [with materials] which will serve as a ready source for a multiplicity of views and approaches in promoting guidance action." The initial chapter considers "Guidance in Perspective." Subsequent chapters consider: "A Framework for Guidance"; "Origins of Guidance"; "Bases for Studying Boys and Girls"; "Studying Students"; "Guidance Information"; "Assisting Students"; "Programing for Guidance"; "School and Community Resources for Guidance"; and, "Research, Evaluation, and Professionalization."—C. H. Miley.

3928. Fossett, Katherine. **Guidance institutes: N.D.E.A.** *Personnel guid. J.*, 1960, 39, 207-209.—6 basic characteristics of successful counselor-preparatory programs are suggested as a guide for National Defense Education Act guidance institutes.—S. Kavruck.

3929. Gerber, Barbara W. (Cheektowaga Central School, N.Y.) **Creativity: A frame of reference for teachers.** *NY State Educ.*, 1960, 48(3), 14-15.—"Creativity does not belong to the specially

talented alone. . . . Teaching for creativity . . . constitutes a change of emphasis, not of subject matter or methods." Characteristics of the creative person and conditions fostering creativity are listed and discussed.—*L. D. Summers, Jr.*

3930. Gowan, J. C. (San Fernando State Coll.) **Organization of guidance for gifted children.** *Personnel guid. J.*, 1960, 39, 275-279.—Guidance for the gifted child is seen as a necessity. Some of the special problems associated with such guidance programs are reviewed.—*S. Kavruck.*

3931. Horst, Paul. (U. Washington) **How much information on test results should be given to students: Views of a research psychologist.** *J. counsel. Psychol.*, 1959, 6, 218-222.—The problems involved in communicating test results to student testees are considered, emphasizing the social point of view. Testers are urged to know the meaning of the test scores on the basis of past experience, to tell the student what the test scores mean, and to try "to get the student to act accordingly."—*M. M. Reece.*

3932. Jordan, John E., & Hunter, William F. **Counseling the blind.** *Personnel guid. J.*, 1960, 39, 210-214.—An operational approach for counseling the blind is suggested.—*S. Kavruck.*

3933. Kinling, William J. **Dissemination of guidance information using data-processing equipment.** *Personnel guid. J.*, 1960, 39, 220-221.—The use of a key punch, sorter, reproducer, interpreter, and tabulator is described for rapid dissemination of pupil information to teachers and counselors.—*S. Kavruck.*

3934. Kirk, Barbara A. (U. California, Berkeley) **Counseling graduate students.** *J. counsel. Psychol.*, 1959, 6, 284-287.—Contrary to the general impression, it was found that graduate students do need professional, vocational, and educational counseling. However, they do not appear to be as free in seeking counseling as undergraduate students. ". . . in many cases there is evidence of improved adjustment to their graduate study."—*M. M. Reece.*

3935. Merrill, Reed M., & Murphy, Daniel T. (U. Utah) **Personality factors and academic achievement in college.** *J. counsel. Psychol.*, 1959, 6, 207-210.—The Edwards Personal Preference Schedule was administered to a group of college students who were achieving academically more than predicted and a similar group who were performing as predicted. Different patterns of needs were found for these groups.—*M. M. Reece.*

3936. Motto, Joseph J. (U. Michigan) **A reply to Dragow on underachievers.** *J. counsel. Psychol.*, 1959, 6, 245-247.—(see 33: 2114) Reporting "conceptual impressions gained from therapeutic counseling with 31 gifted underachievers," the need for clarifying the concept of underachievement is discussed, and operational definitions of underachievement are stressed. Inappropriate curricula and acceptance of failure are not considered to determine underachievement or to be necessary for counseling. An important goal is the counselee's insight into his personality characteristics.—*M. M. Reece.*

3937. Norris, Willa. **More than a decade of training guidance and personnel workers.** *Per-*

*sonnel guid. J.*, 1960, 39, 287-291.—A modal description is presented of the typical graduate of the Michigan State University counselor training program.—*S. Kavruck.*

3938. Polmantier, Paul C., & Schmidt, Lyle D. (U. Missouri) **Areas of preparation for school guidance workers.** *Personnel guid. J.*, 1960, 39, 45-46.—Course offerings for preparation of school guidance workers in state universities are summarized.—*S. Kavruck.*

3939. Rudikoff, Lynn C., & Kirk, Barbara A. (U. California, Berkeley) **Test interpretation in counseling.** *J. counsel. Psychol.*, 1959, 6, 223-229.—The complexity of communicating interpretations of tests to clients is indicated. Specific suggestions are made for communicating the information in a manner that would be acceptable to the client. A case study is described, with a verbatim sample of the interpretation interview.—*M. M. Reece.*

3940. Santavica, G. Gene. (Miami U.) **Supervised experience and selection of counselor trainees.** *Personnel guid. J.*, 1959, 38, 195-197.—A survey of counselor-training institutions has indicated that a majority offer some supervised practice in counseling, supervisors coming from several sources. A variety of counseling situations are open to trainees, and additional opportunities are planned. The greater the enrollment in the training institution, the greater the available experience. Programs tend to be organized under the departments of education and are now being expanded. Terminology is not standardized.—*S. Kavruck.*

3941. Shaw, M. C., Edson, K., & Bell, H. M. **The self-concept of bright underachieving high school students as revealed by an adjective check list.** *Personnel guid. J.*, 1960, 39, 193-196.—Differences in self-concept exist between achievers and underachievers. Female underachievers tend to be ambivalent with regard to feelings toward themselves; male underachievers seem to have more negative feelings about themselves than do male achievers. The data do not indicate whether differences are the cause of, or the result of, underachievement.—*S. Kavruck.*

3942. Shulim, Joseph I. (Brooklyn Coll.) **Experimenting with a career-curricular conference.** *Personnel guid. J.*, 1959, 38, 222-225.—An experiment designed to provide an integrated career and curriculum advisory service is presented.—*S. Kavruck.*

3943. Sinick, Daniel, & Hoppock, Robert. **Research by states on the teaching of occupations.** *Personnel guid. J.*, 1960, 39, 218-219.—Reports of research on teaching occupations in 29 states indicate that much remains to be done if such teaching is to be improved.—*S. Kavruck.*

3944. Watson, Donald E., Rundquist, Richard M., & Cottle, William C. (U. Kansas) **What's wrong with occupational materials?** *J. counsel. Psychol.*, 1959, 6, 288-291.—The readability of a sample of current occupational information materials was determined. The readability level was found to be adequate for high school counselees provided professional or semiprofessional occupations are not described. Material describing such occupa-

tions tends to have too high a reading level for these counselees.—M. M. Reece.

3945. White, Becky J. (Duke U.) **The relationship of self concept and parental identification to women's vocational interests.** *J. counsel. Psychol.*, 1959, 6, 202-206.—Data concerning family background and vocational plans were obtained from a group of college girls and their parents. Q sorts were used to measure self-concept and identification of the girls. Relationships were determined among the data from the personal data sheets, Q sorts, and the Strong Vocational Interest Blank. "... there is some support for the hypothesis that a congruency between a girl's self and ideal conception and the perceptions which her parents have of her are related to the girl's vocational interests."—M. M. Reece.

3946. Wolfe, Dael. (American Ass. Advancement Science, Washington, D.C.) **Diversity of talent.** *Amer. Psychologist*, 1960, 15, 535-545.—"If we are to make full use of our intellectual resources, the first requisite is that we employ all the means at our command to encourage the development of talent. The second requisite is that we learn more about the social factors that aid or impede the development of talent. ... [We should] go beyond personal action and beyond scientific research to consider the question of how our professional activities concerned with talent can be supported and unified by an underlying policy of talent development—a policy that seeks to maximize achievement and thus to maximize the value to society of our resources of talent." Major sections are: The Encouragement of Talent, Social Factors in Talent Development, Policy for Talent Development, The Value of Diversity, Implications, Conclusion.—S. J. Lachman.

(See also Abstracts 3279, 3472, 3659, 3999)

#### EDUCATIONAL MEASUREMENT

3947. Adams, James F. (Temple U.) **The use of the electronic computer for item analysis.** *Educ. psychol. Measmt.*, 1960, 20, 611-613.—Comparative costs are given for doing item analysis on an IBM 650 computer, Flanagan's U-L 27% method, and Aschenbrenner's U-L 10% method. The cost and time make the use of the electronic computer for item analysis questionable.—W. Coleman.

3948. Bose, P. K. (Calcutta, India) **Some criteria in item selection techniques.** *Indian J. Psychol.*, 1958, 33, 101-107.—Criteria are given for psychometricians to use in constructing standardized tests in order for tests to serve their intended purposes. Test batteries should contain tests that are "consistent, efficient, and sufficient."—C. T. Morgan.

3949. Calia, Vincent P. (Boston U. Junior Coll.) **The use of discriminant analysis in the prediction of scholastic performance.** *Personnel guid. J.*, 1960, 39, 184-185.—A discriminant analysis was applied for prediction for membership in 1 of 3 groups: scholastic failure, terminal prospect, and transfer to university status. Success of prediction ranged from 40% to 43% prediction hits. Implications are discussed.—S. Kavruk.

3950. Chatterjee, B. B., & Oad, L. K. **Prognostic value of selection tests for basic school**

**trainees.** *U. Rajputana Stud. (Educ.)*, 1958, 2, 143-172.—Candidates for admission to basic education specialization were given 3 tests: a general information test, an aptitude test, and an interview. The aptitude test was specially constructed for this purpose. It covered modern developments in basic education, personnel and literature of basic education, attitudes toward manual work, certain concrete situations in community basic schools, interests, and a short essay. Both tests had appreciable prognostic value for the theory examination. The aptitude test had good prognostic value for the practical examination. The 2 tests had appreciable intercorrelation. The tests are given in the appendix.—U. Pareek.

3951. Christensen, C. M. **Relationship between pupil achievement, pupil affect-need, teacher warmth, and teacher permissiveness.** *J. educ. Psychol.*, 1960, 51, 169-174.—10 5th-grade classes, 10 4th-grade classes, and 10 4th-grade teachers were used. The investigator constructed 2 devices to test warmth and permissiveness of the teachers and used the Affect-Need Scale of Della-Piana and Gage. Only warmth of teachers was significantly related to vocabulary and arithmetic achievement.—W. E. Hall.

3952. Dash, S. C., & Kanungo, R. (Cuttack, India) **Progressive Matrices and school success: A factor analytic study.** *Psychologia*, 1959, 2, 246-250.—"Progressive Matrices scores and average marks of three successive school examinations in Mathematics, Language, History, Science, General Knowledge, and Aggregate, obtained by a group of 100 students of the top matriculation class were intercorrelated ... and then factor-analyzed by the centroid method. The results ... suggest that nonverbal intelligence plays a major role for success in all the subjects except in History."—C. T. Morgan.

3953. Fredericksen, Norman, & Gilbert, Arthur C. F. (Princeton U.) **Replication of a study of differential predictability.** *Educ. psychol. Measmt.*, 1960, 20, 759-767.—A previous study by the senior author (see 29: 7961) "showed that students classified as 'noncompulsive' were characterized by higher correlations between Strong Vocational Interest Blank scores and freshman grades in engineering than 'compulsive' students." A replication of the study using freshmen engineering students of the 1962 class at Princeton found only the occupational keys most related to engineering holding up. High and low work scores on the Tompkins-Horn Picture Arrangement Test were not significantly related to grades.—W. Coleman.

3954. Garrett, Wiley S. (Warren, O.) **Prediction of academic success in a school of nursing.** *Personnel guid. J.*, 1960, 38, 500-503.—High school point average and scores in tests of arithmetic, silent reading, and clerical aptitude were fairly effective in predicting success in a nursing school, with a multiple R of .64.—S. Kavruk.

3955. Hackett, Herbert R. (U. California) **Use of MMPI items to predict college achievement.** *Personnel guid. J.*, 1960, 39, 215-217.—Results of the study seem to warrant further research in use of the MMPI in discriminating between high and low college achievers.—S. Kavruk.

3956. Hills, J. R., & Raine, W. J. (Regents U. System Georgia) **Pair-comparisons consistency and grades in law school.** *J. appl. Psychol.*, 1960, 44, 94-96.—Can the predictability of academic grades be improved through the use of a test construction technique known as "measures of consistency in making pair comparison judgments"? "... consistency scores from the Legal Traits Test were correlated with grades at eight schools of law." The results were negative. "... these consistency scores are not promising as predictors of law school grades."—J. W. Russell.

3957. Michael, William B., Jones, A. Robert, & Gibbons, Billie D. (U. Southern California) **The prediction of success in graduate work in chemistry from scores on the Graduate Record Examination.** *Educ. psychol. Measmt.*, 1960, 20, 859-861.—The Quantitative, Verbal, Natural Science, Social Science, and Humanities scores on the Graduate Record Examination were used to predict scores on an objective type Background Examination (B.E.) in chemistry for graduate students. The B.E. had 3 sections: inorganic and analytical, organic, and physical chemistry. None of the correlations were significant between the 5 predictors and 3 criterion variables, for a sample of 41 graduate students.—W. Coleman.

3958. Patterson, C. H. (U. Illinois) **Methodological problems in evaluation.** *Personnel guid. J.*, 1960, 39, 270-274.—More survey, exploratory, and technique research is needed together with research designs other than those which have become traditional. (17-item bibliogr.)—S. Kavruck.

3959. Rimland, Bernard. (USN Personnel Research Field Activity, San Diego, Calif.) **The effect of including extraneous numerical information in a test of arithmetic reasoning.** *Educ. psychol. Measmt.*, 1960, 20, 787-794.—Arithmetic subtests containing extraneous information tended to be less homogeneous than subtests composed of the same items without extraneous information. The extraneous information subtests tended to have lower Kuder-Richardson reliabilities.—W. Coleman.

3960. Rodd, William G. (1913 Brad St., Falls Church, Va.) **A cross-cultural study of Taiwan's schools.** *J. soc. Psychol.*, 1959, 50, 3-36.—Analyses of scores of 1290 students on a battery of tests showed sex and city differences rather than differences attributable to native origin, i.e., Taiwan versus Chinese mainland. "The ability of the students in the senior middle schools of Taiwan was demonstrated to be of a high caliber when judged against the American norms of the individual tests ... in intelligence, school achievement, and critical thinking." (41 ref.)—J. C. Franklin.

3961. Saupé, Joe L. (Michigan State U.) **An empirical model for the corroboration of suspected cheating on multiple-choice tests.** *Educ. psychol. Measmt.*, 1960, 20, 475-489.—"The proposed method involves determining the extent of correspondence between the pair of answer sheets concerned in the suspected cheating. The extent of this correspondence is then referred to normative data of expected correspondence of pairs of answer sheets from the test to evaluate the likelihood of a correspondence

as great as that observed." Application of the model to 150 pairs of answer sheets indicated some validity. Wrong as well as right answers are considered in determining correspondence.—W. Coleman.

3962. Shah, Shrikant. **Standardisation of Alexander's Passalong Test for 11+.** *Vidya Bhawan Stud.*, 1956-57, 5, 126-136.—The test was standardized on a sample of 104 boys and 43 girls. Percentile norms for the 2 sexes are reported. The validity is given by its correlation with Menzel's General Intelligence Test (.423) and teachers estimates (.472). Some other related findings are given.—U. Pareek.

3963. Stuart, Irving R. (Hunter Coll.) **An objective scale rating the physically handicapped for educational purposes.** *Personnel guid. J.*, 1959, 38, 211-216.—A scale technique is presented for predicting the success of handicapped students in meeting the problems of everyday life in college.—S. Kavruck.

3964. Thistlewaite, Donald L. **College press and changes in study plans of talented students.** *J. educ. Psychol.*, 1960, 51, 222-234.—This is a follow-up study of 1500 talented students at the end of the 3rd year of college. Some of the major findings were: (a) natural science retained more talented students than biological science; but both fields attracted less new students than the arts, humanities, and social sciences. (b) Faculties which the students perceived as enthusiastic, warm, and informal in their relationship with students and as stressing achievement, humanism, and independence were associated with student changes to advanced training in arts, humanities, and social sciences. (c) Faculties perceived as enthusiastic and as not pressing for compliance were associated with changes to advanced training in natural and biological sciences.—W. E. Hall.

3965. Torrance, E. Paul. (U. Minnesota) **Current research on the nature of creative talent.** *J. counsel. Psychol.*, 1959, 6, 309-316.—Centers for research in creativity are noted, indicating the researchers and the nature of their studies. The Minnesota studies of creativity are described in greater detail, including those concerned with the measurement and identification of creative work, the relation of creative thinking and school learning, and the factors which appear to hinder the development of creativity.—M. M. Reece.

3966. Warren, Phyllis A. (International Schools Found., NYC) **A mental maturity test as one criterion for admission to an American school abroad.** *Personnel guid. J.*, 1960, 39, 197-202.—While useful as a predictor of school grades regardless of pupil's language background, the CTMM is not valid for measuring scholastic ability of students whose native language is not English.—S. Kavruck.

3967. Wesman, Alexander G. (Psychological Corp., NYC) **N.D.E.A.: Opportunities and responsibilities in test development and test use.** *Personnel guid. J.*, 1960, 39, 41-44.—The impact of the National Defense Education Act on the field of evaluation and measurement indicates the need to further perfect measuring devices, to make optimum



use of funds, and to improve test standards and programs of testing.—*S. Kavruck.*

(See also Abstracts 2933(b), 3421, 3449)

#### Testing Programs

3968. Horst, P., & MacEwan, C. Predictor elimination techniques for determining multiple prediction batteries. *Psychol. Rep.*, 1960, 7, 19-50. (Monogr. Suppl., 1960, No. 1-V7, \$2.00)—"Methods are available for selecting from a pool of potential predictor variables the subset of specified size which tends to yield the best predictive efficiency for a given criterion. These methods in general select one variable at a time and may be called predictor accretion methods. They may be used with one or more criterion measures. This article develops a predictor selection technique which begins with the entire pool of potential predictors and eliminates one variable at a time until the desired number of predictors remains. It is applicable for both multiple absolute and multiple differential prediction. This elimination method utilizes much more fully the intercorrelations among all the predictor measures than do the accretion methods. Numerical examples illustrating the method for both types of multiple prediction are provided."—*C. H. Ammons.*

#### Aptitudes

3969. Droege, Robert C. (United States Employment Service, Washington, D.C.) GATB norms for lower high school grades. *Personnel guid. J.*, 1960, 39, 30-35.—The study provides information on the validity of the aptitudes of the GATB for predicting occupational and college success of students tested in the lower high school grades. (19-item bibliogr.)—*S. Kavruck.*

3970. Flanagan, John C., & Dailey, John T. (U. Pittsburgh) Project TALENT: The identification, development, and utilization of human talents. *Personnel guid. J.*, 1960, 38, 504-505.—Project TALENT is a national aptitude and ability census. It may set forth patterns of aptitude and ability which predict success in various careers and may lead to a better understanding of the educational experiences which prepare students for life work.—*S. Kavruck.*

3971. Fleishman, E. A., Fruchter, B. (Yale U.) Factor structure and predictability of successive stages of learning Morse code. *J. appl. Psychol.*, 1960, 44, 97-101.—How can people best able to learn Morse code be identified? To find out, a battery of 14 ability tests was given 310 airmen. Their rate of progress in training was related to this test performance. "A factor analysis of the ability measures was carried out and the factor structure of the criterion measures determined." Tests work best for predicting who will do best in the initial periods of Morse code training. After that it depends more on specific habits acquired in training.—*J. W. Russell.*

3972. King, Donald C., & Besco, Robert O. (Purdue U.) The Graduate Record Examination as a selection device for graduate research fellows. *Educ. psychol. Measmt.*, 1960, 20, 853-858.—The Verbal Test score of the Graduate Record Examination provided statistically significant relation-

ships with ratings of graduate fellows and also a combined rating-grades criterion. The range on the Quantitative Test was restricted to the extreme upper level. Significant differences between departments on both the Q and V scales were found. Expectancy charts were prepared indicating probability of above median performance based on verbal test score.—*W. Coleman.*

3973. Law, Alexander. (Educational Testing Service, Los Angeles, Calif.) The prediction of ratings of students in a doctoral training program. *Educ. psychol. Measmt.*, 1960, 20, 847-851.—A multiple regression equation was derived for predicting scores on the area tests covered in the doctorate program in education at the University of Southern California. Predictor variables were the Aptitude Test and the area tests of the Graduate Record Examination.—*W. Coleman.*

3974. Mohsin, S. M. (Patna, India) Plea for a scientific aptitude test: A preliminary report of the development of such a test. *Indian J. Psychol.*, 1959, 34, 36-42.—"A scientific aptitude test containing four different types of items has been developed." It correlates better with performance in science subjects in secondary school than other tests. 2 equivalent forms have a reliability of .912.—*C. T. Morgan.*

3975. Prakash, J. C. (Bangalore, India) Standardized norms for selected psychological tests. *Indian J. Psychol.*, 1956, 31, 147-148.—Norms based on 1000 boys, 16-21 years of age, in lower secondary and high school grades are presented for Link's Form Board, O'Connor Tweezer Dexterity Test, and O'Connor Dexterity Test.—*C. T. Morgan.*

3976. Tempero, Howard E., & Ivanoff, John M. (U. Nebraska) The Cooperative School and College Ability Test as a predictor of achievement in selected high school subjects. *Educ. psychol. Measmt.*, 1960, 20, 835-838.—Predictive validity correlations between the V, Q, and total score on the SCAT with scores on standardized achievement tests, changes in scores, and scores on one prognostic test were computed. The *r*'s ranged from .26 and .79 with the achievement test scores, but were generally much lower in predicting test score change.—*W. Coleman.*

#### Achievement

3977. Beach, Leslie R. Sociability and academic achievement in various types of learning situations. *J. educ. Psychol.*, 1960, 51, 208-212.—Students were randomly distributed into 4 experimental groups which were lecture, group discussion with instructor, small autonomous groups, and independent study. Sociability was determined by the S scale of Guilford's Inventory of Factors STDCR. A significant relationship was found between sociability and achievement. The less social student showed more achievement in the lecture group and the more social student achieved more in the autonomous group.—*W. E. Hall.*

3978. Brown, W. F., & Abeles, N. Facade orientation and academic achievement. *Personnel guid. J.*, 1960, 39, 283-286.—Facade (faking) scores appear to be based on a common variable, show only a slight relationship with vocabulary, but are

significantly and negatively related to academic achievement in college.—*S. Kavruk.*

3979. Chahbazi, Parviz. (Western Michigan U.) **Use of projective tests in predicting college achievement.** *Educ. psychol. Measmt.*, 1960, 20, 839-842.—Although  $n$  Achievement scores on 2 projective tests had demonstrated  $r$ 's of .35 and .46 with 1st semester grades as a criterion, the  $r$ 's were lower for later college grades. 1st-term grades correlated .76 with all grades.—*W. Coleman.*

3980. Gowan, J. C. (San Fernando Valley State Coll.) **Factors of achievement in high school and college.** *J. counsel. Psychol.*, 1960, 7, 91-95.—Analysis of a number of research studies concerning achievement and underachievement resulted in positing 19 factors, categorized as measures of input, process, and results.—*M. M. Reece.*

3981. Gundersen, Richard O., & Feldt, Leonard S. **The relationship of differences between verbal and nonverbal intelligence scores to achievement.** *J. educ. Psychol.*, 1960, 51, 115-122.—4 4th-grade groups were matched in total IQ but differed in nonlanguage and language quotients. In one group the nonlanguage quotient exceeded the language by 25 or more points; in another the opposite was true. The remaining groups represented intermediate stages. The group with language-quotient superiority ranked first in each area of achievement, and the nonlanguage superiority group ranked last. Teachers were more aware of special talents in the language superiority group than in the nonlanguage group. The language group preferred verbal free time activity, whereas the nonlanguage group preferred physical activity.—*W. E. Hall.*

3982. Gupta, B. Das. (Calcutta, India) **A proposed weighting and scoring system for performance tests.** *Indian J. Psychol.*, 1958, 33, 42-48.—"Scores on performance tests are shown to be influenced by both item difficulty and speed of completion. A statistical procedure for answering certain questions about scoring such tests is presented, based upon item difficulty data and the empirical time distributions. Methods of item scoring for individual test administration, and test scoring for group administration, are given."—*C. T. Morgan.*

3983. Hansmeier, Thomas W. (Kent State U.) **The Iowa Tests of Educational Development as predictors of college achievement.** *Educ. psychol. Measmt.*, 1960, 20, 843-845.—The 9 individual ITED tests yielded  $r$ 's ranging from .63 to .49 with college grades. The ITED composite score provided an  $r$  of .71. A multiple  $R$  of .77 was obtained by adding percentile rank in high school class.—*W. Coleman.*

3984. Hilgard, Ernest R., & Jandron, Earl L. **Stability of item statistics in two institutions.** *J. educ. Psychol.*, 1960, 51, 195-198.—The same examination (115 multiple choice items in introductory psychology) was given at 2 different institutions where clientele and arrangements for the 1st course differ markedly. Test difficulty correlated .80. The mean discrimination indexes did not differ significantly for the 2 schools, and the 2 sets correlated .31 with each other. It is suggested that one should err on the side of using easy items.—*W. E. Hall.*

3985. Lum, Mabel K. M. **A comparison of under- and overachieving female college students.**

*J. educ. Psychol.*, 1960, 51, 109-115.—3 experimental groups of 20 students each were given the Brown-Holtzman Survey of Study Habits and Attitudes. The groups were equated on ACE scores but differed in grade point averages. The underachievers differed significantly from overachievers in Achievement Drive (.01 level) and in Self-confidence, Educational Philosophy, and Procrastination Orientation (.05 level). There were no differences in the subscales of Study Habits or Teacher Valuation.—*W. E. Hall.*

3986. Rimland, Bernard. (USN Personnel Research, San Diego, Calif.) **The effects of varying time limits and of using "right answer not given" in experimental forms of the U. S. Navy Arithmetic Test.** *Educ. psychol. Measmt.*, 1960, 20, 533-539.—The criteria employed were: increased variance, increased  $r$  with the operational arithmetic test, and decreased  $r$  with the Navy General Classification Test. The "none of these" alternative does not improve the test. Shorter time limits did not affect performance in arithmetic.—*W. Coleman.*

3987. Scannell, Dale P. **Prediction of college success from elementary and secondary performance.** *J. educ. Psychol.*, 1960, 51, 130-135.—Test scores on the Iowa Tests of Basic Skills (ITBS) and the Iowa Tests of Educational Development (ITED), grade point average (GPA), and rank in high school were obtained from a sample of 3202 students in Iowa State College and Iowa University. High school GPA was the best predictor of college freshmen GPA ( $r = .67$ ) and 4-year college GPA ( $r = .59$ ). ITED yielded multiple correlations of .63 with freshman GPA and .53 with 4-year GPA. ITBS (elementary school level) correlated .85 with college freshman GPA.—*W. E. Hall.*

3988. Schutz, Richard E. (Arizona State U.) **A factor analysis of academic achievement and community characteristics.** *Educ. psychol. Measmt.*, 1960, 20, 513-518.—"A factor analysis of 20 sociological, economic, and educational achievement measures based on 84 local communities yielded five orthogonal factors." They were interpreted as urban-financial, intellectual climate, economic stability, academic achievement, and low socioeconomic status. Thurstone's complete centroid method was used with Kaiser's varimax method utilized for the analytic orthogonal rotations.—*W. Coleman.*

3989. Shaw, Merville C., & McCuen, John T. **The onset of academic underachievement in bright children.** *J. educ. Psychol.*, 1960, 51, 103-109.—An attempt to determine if there is a specific grade at which underachievement begins. Achievers and underachievers with IQs over 110 were compared at every grade level from 1 through 11. All Ss ( $n = 168$ ) were from a single school. For boys, underachievement began in Grade 1 and increased throughout, becoming significant in Grade 3. Female underachievers actually exceeded the achievers for the first 5 years, although not significantly. From Grade 6 on they were consistently behind, the difference becoming significant by Grade 9.—*W. E. Hall.*

3990. Singh, Baldev. **Correlation between intelligence and school achievements.** *Vidya Bhanwan Stud.*, 1956-57, 5, 1-15.—Intercorrelations were

worked out between scores on an intelligence test and school marks on 5 subjects of high school students. Intercorrelations were also worked out between the 7 parts of the intelligence test and within the school subjects. Mathematics correlated most with the intelligence test scores and social studies the least ( $n = .23$ ). The study revealed 3 factors as playing an important role in the achievement: a general factor (general scholastic examination ability comprising  $g + v:ed + X$ ), the ability to express oneself in Hindi, and the verbal facility factor.—U. Pareek.

3991. Singh, Sardara. Construction of achievement test in agriculture for Class VIII. *Vidya Bhawan Stud.*, 1956-57, 5, 34-47.—An achievement test in agriculture was standardized. The test contained items relating to plant life, agricultural operations, plant food and manure, soil, and animal life. Various types of items were included in the test. The final results showed almost normal distribution of the scores. Reliability coefficient as found by split-half method was .91, and validity coefficient found by correlating the test scores with school marks was .61.—U. Pareek.

(See also Abstract 3918)

#### EDUCATION PERSONNEL

3992. Dugan, Willis E. (U. Minnesota) The impact of N.D.E.A. upon counselor preparation. *Personnel guid. J.*, 1960, 39, 37-40.—5 positive influences of National Defense Education Act institutes are cited as well as 5 points of concern.—S. Kavruck.

3993. Evans, Carol S. (Douglas Aircraft Co., Santa Monica, Calif.) A marginal punched card system for human factors literature. *Hum. Factors*, 1959, 1(4), 32-46.—A marginal punched card bibliographical system for use by human factors groups is described. A list of 32 major subjects is included along with 2 examples of subject outlines. Among the advantages claimed for the system are ease of initiation of search for articles in a specific subarea, complete cross-indexing, simplicity in selective sorting, low cost, no necessity for alphabetical filing, and ease of expansion. The only disadvantage listed is that several insertions may be necessary to locate a specific reference.—J. M. Christensen.

3994. Harmon, D., & Arnold, D. L. High school counselors evaluate their formal preparation. *Personnel guid. J.*, 1960, 39, 303-306.—40% of the group studied had no supervised practice. Group guidance needs study concerning its content and procedures. The relationships of psychology to counseling need analysis. (15-item bibliogr.)—S. Kavruck.

3995. Hilton, Thomas L. (Carnegie Inst. Technology) Alleged acceptance of the occupational role of teaching. *J. appl. Psychol.*, 1960, 44, 210-215.—At the beginning of graduate training, 122 inexperienced liberal arts graduates took a questionnaire dealing with acceptance of teaching as an occupation. They were studied 2 years later after having had a year in teaching. An Index was determined for 3 groups according to degree of permanency in teaching. "The Index has a small predic-

tive validity, but only for the women in the sample."—J. W. Russell.

3996. Howsam, Robert B. (U. California, Berkeley) New designs for research in teacher competence. Burlingame, Calif.: Joint Committee on Personnel Procedures of the California School Board Association and the California Teachers Association, 1960. 48 p. \$1.00.—After summarizing previous research in the field and concluding that "despite the many studies of teachers and teacher competence made in the last fifty years, relatively little is presently known," a proposal is made for a new research approach and program in California through the use of visual and sound recordings of total classroom situations. "Possession of such records could be expected to open up vast new possibilities for study and analysis." The various research uses of the recordings are discussed. (65-item bibliogr.)—J. Z. Elias.

3997. Howsam, Robert B. (U. California, Berkeley) Who's a good teacher? Problems and progress in teacher evaluation. Burlingame, Calif.: Joint Committee on Personnel Procedures of the California School Board Association and the California Teachers Association, 1960. 48 p. \$1.00.—Research on the evaluation of a teacher encounters major obstacles in the selection of suitable criteria for teacher effectiveness. A summary is given of research findings based on the criteria generally used: teacher traits or characteristics, pupil gain, teacher behavior, and teacher personality. Various suggestions for developing workable procedures in evaluation are made. (61-item bibliogr.)—J. Z. Elias.

3998. Lindgren, H. C., & Lindgren, F. Expressed attitudes of American and Canadian teachers toward authority. *Psychol. Rep.*, 1960, 7, 51-54.—"An incomplete sentences test composed of items relating to authority and authority figures was administered to 48 American and 48 Canadian teachers to test the hypothesis that Canadians would be more inclined to give responses indicating accepting attitudes toward authority and less inclined to give responses indicating hostile attitudes toward authority. However, Canadian teachers gave significantly more hostile responses. Item analysis showed that those items which evoked accepting responses from Canadians were concerned with figures that are traditionally prestige-laden. More hostile responses from Canadian teachers were evoked by items concerned with figures in authority in the business world and with interaction with authority on an interpersonal level. These latter two categories also tended to evoke more anxious reactions from Canadians rather than Americans."—C. H. Ammons.

3999. Merwin, Jack C., & Di Vesta, Francis J. (Syracuse U.) A study of need theory and career choice. *J. counsel. Psychol.*, 1959, 6, 302-308.—Measures of needs considered to be related to teaching, of the individual's concept of the extent to which teaching facilitated or hindered the satisfaction of these needs, and of attitudes toward career teaching were used with 218 college freshmen. The theory that "the degree of acceptance (or rejection) of a career is dependent on the individual's perceptions that the career facilitates (or hinders) the satisfaction of his important needs" was tested by these

measures. The results are viewed as consistent with the rationale. It is concluded also "that a change of attitude toward a career field can be altered by manipulating cognitive structure."—*M. M. Reece.*

4000. Myers, Roger A. Faculty perceptions of student success in teacher education. *J. educ. Psychol.*, 1960, 51, 235-239.—A check list of 169 descriptive statements for good and poor students were selected from faculty interviews. 50 members of a department of education checked the 169 statements which were factor analyzed. 4 factors were derived. Factor 1 appears to be a general global conception of students. Factor 2 appears to be a readiness to learn. Factor 3 appears to be social acceptability, while Factor 4 is composed of negatively loaded statements of hostility and rejection.—*W. E. Hall.*

4001. Popham, W. James, & Trimble, Robert R. (San Francisco State Coll.) The Minnesota Teacher Attitude Inventory as an index of general teaching competence. *Educ. psychol. Measmt.*, 1960, 20, 509-512.—2 matched groups of 90 teachers administratively rated as inferior or superior in general effectiveness were compared on the MTAI. The groups were matched on amount of education, teaching level, subject taught, and size of school system. The MTAI was administered by mail with 87.2% returns. The final groups used each had 72 Ss with the difference in means on the MTAI significant at the .01 level. The authors conclude that the MTAI may be used to provide an indication of a teacher's general competence.—*W. Coleman.*

4002. Saxena, G. N. An investigation into adjustment of pupil-teachers at Vidya Bhawan. *Vidya Bhawan Stud.*, 1956-57, 5, 65-70.—90 student-teachers volunteered for this study covering 10 areas of adjustment. The results revealed that 78% of the students were satisfied with their vocation, 88% were getting lower salaries than they deserved, 42% were dissatisfied with service conditions, 48% were worried about frequent and distant traveling, 93% felt that they were helpful and sympathetic towards their colleagues, 96% enjoyed joking with their friends, 75% had cordial relations with their students, 80% felt that they had no difficulty in maintaining discipline, 37% had acute sex problems, and 88% were much dissatisfied with the examination system.—*U. Pareek.*

4003. Solomon, Joseph C. (U. California Medical School, San Francisco) Neuroses of school teachers: A colloquy. *Ment. Hyg., NY*, 1960, 44, 79-90.—Berlin, Lindgren, and Baruch (a psychiatrist and 2 psychologists) discuss some of the classroom problems of the school teacher from the standpoint of the mental hygiene of both the learners and the teacher. The difficulties the teacher experiences because of her dual role of teacher and substitute parent and the unrealistic demands for services on the part of schoolboards, the community, and the parents of their students tend to increase the anxiety of the teacher, especially those who are less experienced. Some of this is bound to be reflected in their attitudes toward the pupils. It is urged that teachers "learn enough about the reactions of their pupils to themselves and of their unconscious reaction to pupils so that they can teach more effectively."—*M. A. Seidenfeld.*

# INDUSTRIAL & MILITARY PSYCHOLOGY

4004. ———. Current trends in industrial psychology. *Int. labour Rev.*, 1960, 82, 572-595.—A description of the trend of psychological research on selection, training, work study and human engineering, job analysis, work measurement and wage incentives, appraisal of performance, work methods, safety, job attitudes, occupational adjustment, organization, management and supervision, and the organization of groups. (100 ref.)—*C. T. Morgan.*

4005. Baritz, Loren. (Wesleyan U.) The servants of power. Middletown, Conn.: Wesleyan Univ. Press, 1960. xii, 273 p. \$4.50.—Applications of industrial psychology, industrial sociology, and human relations in a cross section of American industry is traced historically. Social science research in several industries is discussed; however, 2 of the 10 chapters are devoted primarily to the Hawthorne Works research projects. Ethical and social implications of psychological testing, merit ratings, attitude surveys, personnel counseling, role playing, and other techniques developed by the social scientist and used by the manager for controlling the workers' productive output are analyzed. Extensive references include interviews with other social scientists, executives in industry, labor leaders, scientific publications, and trade magazines.—*P. L. Crawford.*

4006. Cherns, A. B. Priorities for research in the social sciences in industry. *Personnel Mgmt.*, 1960, 42, 234-238.—Industry must be able to view its problems in a social science context and the social scientist must mix with industrial people to learn the nature of these problems. From this mutual interest will result more fruitful research. "We should give urgent attention to the training of social science practitioners for consultancy." Several areas requiring additional research are discussed briefly.—*A. R. Howard.*

4007. Haire, Mason. (U. California, Berkeley) Business is too important to be studied only by economists. *Amer. Psychologist*, 1960, 15, 271-272.—"One of the relatively major interests of the Ford Foundation at present is providing assistance in the improvement of business education. Ford has allocated more than \$10,000,000.00 to this end. . . . For psychologists, apart from their general interest in education, the special interest comes from the emphasis put, both in the books and in the Ford Foundation's program, on the social sciences in general and on psychology in particular. . . . The recognition of psychology as a discipline as one of the bases from which an understanding of business as a social institution must flow makes a distinct change in the essential character of industrial psychology."—*S. J. Lachman.*

4008. Jacobius, A. J., Kenk, R., Marrow, E., Plavnieks, Ilga M., Voulgaris, K., & Davis, L. D. (Library of Congress, Washington, D.C.) Aerospace medicine and biology (formerly, Aviation medicine): An annotated bibliography. Vol. III. 1954 literature. Washington, D.C.: United States Department of Commerce, Office of Technical Services, 1960. v, 542 p. \$6.00.—1386 abstracts.—*C. T. Morgan.*

4009. Jardillier, P. L'avenir de la psychologie industrielle. [The future of industrial psychology.]



*Travail hum.*, 1960, 23, 207-340.—This lengthy review, with 115 references in French and in English, covers 8 main topics: general writings, measures of aptitudes and knowledge, personality, accidents, working conditions, job analysis and evaluation, disabilities, and the place of personnel in a business. The author sees industrial society as forcing everyone into an identical mold in living, working, feeling, in all phases of living. The goal of industrial psychology is to safeguard man against all this, so that each man can use and enjoy his fullest talents.—*R. W. Husband.*

(See also Abstracts 2957, 2961, 3713)

#### VOCATIONAL GUIDANCE & REHABILITATION

4010. Austin, Elizabeth. (Los Angeles County General Hosp., Calif.) **Medical problems in rehabilitation.** *Amer. Arch. rehabilit. Ther.*, 1960, 8(1), 25-26.—The basic principles of psychology applied in rehabilitation are reviewed.—*L. Shatin.*

4011. Corwin, R., Taves, M. J., & Haas, J. E. **Social requirements for occupational success: Internalized norms and friendship.** *Soc. Forces*, 1960, 39, 135-140.—Data from 48 nurses indicate "that sentiments such as friendship may have a greater influence on the achievement of [occupational] success than internalization of official structural norms . . . under some conditions." The conditions requiring either internalization or friendship remain to be specified; 2 of these are offered tentatively.—*A. R. Howard.*

4012. Crites, John O. (State U. Iowa) **Ego-strength in relation to vocational interest development.** *J. counsel. Psychol.*, 1960, 7, 137-143.—A predicted positive relationship between ego-strength and occupational interest patterning was supported in a sample of 100 male Ss at 2 age levels. A positive relationship between ego-strength and occupational interest level was not confirmed. Several intervening variables are noted as relevant to ego and interest development.—*M. M. Reece.*

4013. Gaddes, William H. (Victoria Coll., Canada) **Current influences in the development of a concept of vocational interest.** *Personnel guid. J.*, 1959, 38, 198-201.—The development of a concept of vocational interest appears to be a result of the appearance of interest inventories, "ego psychologies," theories of human motivation, and the use of clinical techniques in vocational analysis. (27-item bibliogr.)—*S. Kavruck.*

4014. Ghei, Somnath. (Defence Science Organization, New Delhi, India) **Vocational interests, achievement, and satisfaction.** *J. counsel. Psychol.*, 1960, 7, 132-136.—The Minnesota Vocational Interest Inventory was used in the development of a classification key, a satisfaction key, and an achievement predictor key for IBM workers. The 59-item Classification Key, the 60-item Satisfaction Key, and the Predictor Key all had a test-retest reliability of .85. Cross-validation data were judged to be satisfactory. The use of satisfaction as a variable for differentiating these workers is discussed.—*M. M. Reece.*

4015. Holland, John L. (National Merit Scholarship Corp., Evanston, Ill.) **The relation of the Vocational Preference Inventory to the Sixteen Personality Factor Questionnaire.** *J. appl. Psy-*

*chol.*, 1960, 44, 291-296.—How valid is the Holland Vocational Preference Inventory? The VPI, a short form of this inventory, and Form A of Cattell's Sixteen Personality Factor test were administered via mail to 783 boys and 394 girls and the scores intercorrelated. These "generally provided positive evidence for the construct validity of the VPI and its rationale."—*J. W. Russell.*

4016. Izard, Carroll E. (Vanderbilt U.) **Personality characteristics of engineers as measured by the Edwards Personal Preference Schedule.** *J. appl. Psychol.*, 1960, 44, 332-335.—What are the personality characteristics of people who are doing well in engineering? "The average personality (PPS) profile of 81 experienced engineers and that of the 750 male liberal arts students in Edwards' norm group were found to be significantly different by an analysis of variance technique." Things and processes appeal to engineers more than do people.—*J. W. Russell.*

4017. Levy, S. **Guide to counseling.** New Rochelle, N.Y.: Martin M. Bruce, 1960. 24 p. \$2.25.—Accompanying Levy's *So You Are Going To Be Counseled!* (see 35: 4018), this is a manual for the supervisor who is to conduct counseling sessions with employees. Benefits and blocks in counseling are outlined. Abilities and skills, job environment, and motivation are seen as the major influences in understanding job behavior. Each of these is briefly discussed with an eye to aiding the supervisor to conduct a better interview, plus suggestions as to how to behave during the session. The booklet closes with a section on "tips on creative counseling" which includes a catalogue of "types" (Agreeable Archie, Defensive Dexter, Silent Sam, etc.).—*W. L. Barnette, Jr.*

4018. Levy, S. **So you are going to be counseled!** New Rochelle, N.Y.: Martin M. Bruce, 1960. 11 p. \$2.25.—A guidebook written for an employee scheduled for a counseling session with a supervisor where job performance is to be reviewed and plans made for future improvement and personal development. General purpose of the session is explained; the importance of listening as essential to good communication is stressed. The general goal is to work toward increased mutual understanding and agreement (as, for example, what the job really is). Future plans can be made only after discussing what, how, and why of present job performance. At the end of the interview employee and supervisor fill out cooperatively an interview summary (blank form accompanies manual, one copy to be retained by employee, other by supervisor) which becomes a record of plans worked out during the counseling session. Suggestions about how employee might prepare for such interviews are also given (volunteer your own ideas, set specific improvement goals, do not feel defensive or too self-confident).—*W. L. Barnette, Jr.*

4019. Lurie, W. A., Goldfein, J., & Baxt, R. **An intensive vocational counseling program for slow learners in high school.** *Personnel guid. J.*, 1960, 39, 21-29.—Some of the program achievements were: greater realism and maturity in vocational planning; a higher level of intelligence than expected from group tests; and an increase in the proportion of students engaged in part-time, after-school work. (Questionnaire)—*S. Kavruck.*

4020. McPhee, William M., & Magleby, Frank L. (U. Utah) **Success and failure in vocational rehabilitation.** *Personnel guid. J.*, 1960, 38, 497-499.—A larger percentage of vocationally successful clients were more socially adequate, had less serious health problems, made better use of available services for education and training, were less than 49 years of age at application. 6 other factors associated with success in vocational rehabilitation are suggested.—S. Kavruck.

4021. Nelson, Roberta J., & England, George W. (U. Minnesota) **Graduate training in industrial relations.** *Personnel guid. J.*, 1960, 39, 53-57.—The study consists of an analysis of the records of 40 students who completed their masters degree work in industrial relations with a follow-up in work situations. Graduate training was considered good by the group.—S. Kavruck.

4022. Reid, Ellen. **Factors influencing vocational rehabilitation of the blind.** New York: American Foundation for the Blind, 1960. iii, 128 p. \$1.50.—"The necessity of a thorough diagnosis based on sufficient knowledge of the client and understanding of human behavior to interpret his needs and abilities and to judge his motives correctly" is stressed. Psychological, educational, social, and physical aspects are described and their dynamics discussed and illustrated with material from case histories.—C. Y. Nolan.

4023. Schletzer, Vera M. (U. Minnesota) **Labor market participation of physically handicapped persons in Minnesota.** *Personnel guid. J.*, 1960, 39, 6-10.—Physically handicapped persons who had been employed prior to disablement were able to maintain their occupational status levels. The high percentage of unemployment of long duration among the physically handicapped is, however, a significant finding.—S. Kavruck.

4024. Schwarzweller, H. K. **Values and occupational choice.** *Soc. Forces*, 1960, 39, 126-135.—241 girls and 199 boys, seniors in 8 rural Kentucky high schools, provided questionnaire data which supported the hypotheses that "(1) value orientations influence occupational selection, and (2) occupational value orientations are learned in the socialization process." Analysis of 12 value variables "suggests that job-choosing criteria tend to be found as though in clusters, and the value orientations which make up these clusters tend to have similar sociocultural origins."—A. R. Howard.

4025. Simpson, R. L., & Simpson, Ida H. **Values, personal influence, and occupational choice.** *Soc. Forces*, 1960, 39, 116-125.—The values and sources of influence affecting the occupational decisions of 130 male sociology undergraduates planning to enter business, scientific and esthetic, and general cultural occupations are examined by questionnaires. Interrelationship of the variables is noted.—A. R. Howard.

(See also Abstracts 2968, 3689)

#### OCCUPATIONAL & CAREER INFORMATION

4026. Brender, Myron. (Brooklyn Coll.) **Toward a psychodynamic system of occupational**

**classification.** *J. counsel. Psychol.*, 1960, 7, 96-100.—The concept of "intrinsic reward or job satisfaction" is used as a focal point for occupational classification. This approach is illustrated, and implications for research are discussed. An appended "Comment" discusses the difficulties of selecting adequate categories with this system.—M. M. Reece.

4027. Cotton, Jo, & Stoltz, Robert E. (Southern Methodist U.) **The general applicability of a scale for rating research productivity.** *J. appl. Psychol.*, 1960, 44, 276-277.—"The RBD III, a forced-choice rating form to provide scores indicative of a person's productive research behavior in physical science research settings, was administered in a setting other than the one in which it was developed." 50 Ss were selected at random from 168 research engineers. Supervisory judgments of a person's creativity activity indicated its validity. The "RBD III can be used to provide criterion scores for research productivity in other physical science research settings."—J. W. Russell.

4028. Deb, Maya. (Calcutta, India) **Abilities required for engineering profession and their relative importance.** *Indian J. Psychol.*, 1958, 33, 183-185.—750 successful engineers were given a list of 20 abilities and asked to rate the degrees of proficiency possessed by them in their student life, using A for above average, B for average, and C for below average. The data obtained were treated by Likert's scaling method, and weights for each category of proficiency were determined.—C. T. Morgan.

4029. Dunnette, M. D., & Kirchner, W. K. (Minnesota Mining & Manufacturing Co., St. Paul) **Psychological test differences between industrial salesmen and retail salesmen.** *J. appl. Psychol.*, 1960, 44, 121-125.—How does the prediction of success in selling vary according to the type of selling done? Using a Sales Job Description Checklist, 50 retail salesmen and 70 industrial salesmen were identified and given an intelligence, interest, and personality inventory, plus an adjective checklist. "The Industrial salesman places heavy emphasis on ingenuity, inventiveness, and the exercise of his wits in his job. . . . The Retail salesman places heavy emphasis on planning, hard work, and persuading other people of his point of view or way of doing things."—J. W. Russell.

4030. Fleishman, E. A., & Ornstein, G. N. (Yale U.) **An analysis of pilot flying performance in terms of component abilities.** *J. appl. Psychol.*, 1960, 44, 146-155.—"Measures of flying proficiency in 24 separate maneuvers were obtained on a sample of student pilots. The intercorrelations among these maneuver performances were subjected to factor analytic study. The interrelationships were best interpreted in terms of ability factors, most of which had been identified previously in laboratory studies of experimental perceptual-motor tasks. The factors were identified as Control Precision, Spatial Orientation, Multilimb Coordination, Response Orientation, Rate Control, and Kinesthetic Discrimination. The results seem to indicate the usefulness of such ability categories in describing complex skills. Similar analyses of the interrelationships among component performance measures of other complex jobs may provide one way of defining the ability requirements

underlying proficiency in those jobs." (33 ref.)—*Author summary.*

4031. Harding, Francis D., Madden, J. M., & Colson, K. (USAF Wright Air Development Division, Wright-Patterson AFB, O.) **Analysis of a job evaluation system.** *J. appl. Psychol.*, 1960, 44, 354-357.—When supervisors or craftsmen attempt to rate specialists, should they combine their judgments? What is the interrelationship between the parts and what is the reliability of the Air Force's job evaluation system? The latter was tried out on a sample of jobs with 50 Air Force Specialists as Ss. Consensus ratings did not seem necessary. Using too few factors seemed undesirable. A discrepancy was found between the results of 2 measures of reliability, although one, at least, provided fairly high values.—*J. W. Russell.*

4032. Harris, Douglas. (Purdue U.) **The development and validation of a test of creativity in engineering.** *J. appl. Psychol.*, 1960, 44, 254-257.—"Two forms of a 20-item test of creativity were developed through analyses of item response data of 345 engineering students at Purdue University. Three scores were developed for the test: Fluency score, Flexibility score, and Originality score. Investigations of the validity, reliability, interscorer agreement, relationships with other tests, and 'face validity' of the Creativity scores were made with 64 product development engineers and process engineers in a large automobile accessories manufacturing company." Significant validity was found.—*J. W. Russell.*

4033. Seashore, S. E., Indik, B. P., & Georgopoulos, B. S. (U. Michigan) **Relationships among criteria of job performance.** *J. appl. Psychol.*, 1960, 44, 195-202.—Because intercorrelations between 5 criteria of job performance were low, "overall performance" seems to be of less value than previously thought. Ss were 975 individuals in 27 units of a delivery service firm. The 5 measures of job performance were: overall effectiveness, productivity, chargeable accidents, unexcused accidents, and errors. "Measurement and use of job performance criterion variables will remain at a primitive and empirical level until there is created some complex theory of job performance which takes into account systems of causal and conditioning variables."—*J. W. Russell.*

4034. Triandis, Harry C. (U. Illinois) **A comparative factorial analysis of job semantic structures of managers and workers.** *J. appl. Psychol.*, 1960, 44, 297-302.—How well will Osgood's Semantic Differential work on a restricted domain, in this case to show how managers and workers differ in the way they respond to attributes of jobs? "Forty-seven managers and 56 workers completed a 38 scale semantic differential with five jobs. The scales of the differential were selected by sampling lists of attributes of jobs obtained from 25 managers and 20 workers, with an adaptation of Kelly's Repertory Test." Factor analysis produced different factors compared to those by Osgood. "There were also certain differences between the factors obtained from the managers and those obtained from the workers." (16 ref.)—*J. W. Russell.*

4035. Tupes, Ernest C. **Personality traits related to effectiveness of junior and senior air force officers.** *USAF WADC tech. Note*, 1959, No. 59-198. iii, 9 p.—The factor structure underlying peer ratings of personality traits of senior officers closely resembled that of the junior officers. With one exception, there was agreement between junior and senior officers on the relative importance for officer effectiveness of 30 personality traits. The 2 groups showed even greater similarity in the relationships of the personality trait ratings to Officer Effectiveness Reports. Hence any officer selection program which screens on personality variables essential to junior-officer success will also select for traits characteristic of effective field-grade officers.—*USAF WADC.*

4036. Turner, Weld W. (General Motors Inst.) **Dimensions of foreman performance: A factor analysis of criterion measures.** *J. appl. Psychol.*, 1960, 44, 216-223.—Data pertaining to the value of measures of foreman performance were subjected to factor analysis. 20 criterion variables, 9 ratings, and 11 objective measures were used with 102 foremen in one plant and 104 in another. "Four meaningful dimensions were identified by factor analyzing the measures separately for each plant. Relevance weights for the dimensions were derived from superintendents' relevance rankings of the 20 variables."—*J. W. Russell.*

4037. Tyler, Leona E. (U. Oregon) **Distinctive patterns of likes and dislikes over a twenty-two year period.** *J. counsel. Psychol.*, 1959, 6, 234-237.—The results obtained for the Strong Vocational Interest Blank by 71 physicians in 1927 and again in 1949 were scored on 4 special keys. Significant results were obtained "showing that like-dislike patterns are relatively stable." Other descriptive information is also presented.—*M. M. Reece.*

4038. Walmer, C. R. (Mellon Inst., Pittsburgh, Pa.) **Who are the mentally and physically handicapped workers?** *Advanc. Mgmt.*, 1959, 24(4), 11-15.—"When all borderline cases of physical and mental ailments are taken into consideration, the statistical picture of the number of handicapped employed by industry is blown up to much larger proportions. Just how many millions of workers are involved cannot be determined until a somewhat common concept of the term 'handicapped' is held by industry as a whole and well-planned and well-conducted studies are made and accurate records kept of the findings."—*C. T. Morgan.*

4039. Westby, David L. **The career experience of the symphony musician.** *Soc. Forces*, 1960, 38, 223-230.—The aspirations and experience of a selected group of musicians in one major symphony orchestra are described. Included are commentary upon factors involved in mobility, mechanisms of mobility, and modifications in occupational identification.—*A. R. Howard.*

(See also Abstracts 3300, 3336, 3425)

#### SELECTION, PLACEMENT, & APPRAISAL

4040. Ambler, Rosalie K. **The Officer Selection Battery as an adjunct to the Naval Aviation Selection Battery.** *USN Sch. Aviat. Med. res. Rep.*, 1959, Proj. No. MR005.13-3003, Sub. 1, No. 31. ii, 14 p.—The 8-test Officer Selection Battery (OSB)

was assessed against ground grades and flight attrition criteria. The OSB Mathematics and Arithmetic Reasoning Tests in combination with the Flight Aptitude Rating (FAR) produced maximum ground grade validity. The FAR flight attrition validity was augmented only slightly or not at all by OSB subtests.—*L. Shatin.*

4041. Anderson, C. W. (McGill U., Canada) **The relation between speaking times and decision in the employment interview.** *J. appl. Psychol.*, 1960, 44, 267-268.—Is a job applicant more likely to be hired if the personnel interviewer does the most talking? "A sample of 115 employment interviews conducted by six Army personnel officers was examined. The applicant was accepted by the interviewer in 70 cases and rejected in 45 cases. From a recording of each interview measures were taken of the time the applicant spoke, the time the interviewer spoke, and the total time. The time vacant of speech was determined by subtracting the speaking times from the total time of the interview. . . . The interviewer influences both the amount the applicant talks and the amount of the time free of speech that accumulates during the interview. The amount the interviewer talks appears to be directly related to his decision to accept an applicant."—*J. W. Russell.*

4042. Bonnardel, R. **Un exemple de l'influence d'une double sélection sur la valeur des coefficients de corrélation.** [An example of the influence of double selection on the value of correlation coefficients.] *Travail hum.*, 1960, 23, 361-362.—The mean coefficients for 2 types of tests administered to 7 groups of candidates to a vocational school fell from .69 to .29. This reduction corresponds to what could be predicted by theoretical formulas knowing the selection ratio for the 2 categories of tests.—*R. W. Husband.*

4043. Brokaw, Leland D. **Prediction of Air Force training and proficiency criteria from Airman Classification Battery AC-2A.** *USAF WADC tech. Note*, 1959, No. 59-196. 21 p.—Validity of the Airman Classification Battery AC-2A during the first 14 months of its administration is reported. Data are presented for 46 specialties for which both technical training and job proficiency criteria were available, in the form of final school grades and Airman Proficiency Test scores. Technical training validities are given for an additional 20 technical schools. The expectation of some reduction of general validity as a function of maximizing differentiating power was realized. Slightly greater drops in general validity than had been anticipated were found in the mechanical and administrative aptitude clusters, while the remainder of the battery showed validity comparing favorably with the preceding Battery AC-1B. The AC-2A Battery demonstrated itself to be an effective instrument for differential classification; interpretation of its validities are made in this frame of reference.—*G. E. Rowland.*

4044. Brokaw, Leland D. **Prediction of criteria for medical and dental specialties from Airman Classification Battery AC-2A.** *USAF WADC tech. Note*, 1959, No. 59-202. iii, 8 p.—Validation of Airman Classification Battery AC-2A for training grades in 5 medical and 1 dental specialty, and for Airman Proficiency Test scores in 2 medical career fields, Pharmacy Specialist, and Medical Administrative

Specialist, reveals a satisfactory predictive efficiency for the General Aptitude Index.—*USAF WADC.*

4045. Bucklow, M. **Staff reporting: A new look at the halo effect.** *Personnel pract. Bull.*, 1960, 16 (4), 29-33.—Despite improvements in rating-scale construction and training of raters, little progress has been made toward item independence. If items are constructed so "as to relate to clearly observable aspects of behaviour which do not overlap" the rating will be improved although "halo" cannot be eliminated entirely. Intercorrelations between accuracy, speed, application, personality, temperament, mental alertness, knowledge, and initiative for male and female bank officers are presented in tables.—*J. L. Walker.*

4046. Buel, W. D. (Pure Oil Co., Chicago, Ill.) **Stability of preference indices in forced-choice rating scale items.** *Engng. industr. Psychol.*, 1959, 1, 134-137.—11 members of middle management contributed behavior descriptions of good and poor accounting supervisors. These were converted to a scale of 143 check-list items on which they rated 32 Ss. The mean of the total responses to each item served as a preference index for that item and biserial *r*'s served as discrimination indices. From these a forced-choice scale using 23 duads was constructed, and 3 months later the 11 Os again rated the 32 Ss. Relatively minor fluctuations in PI values occurred on 7 duads and these tended to diminish the sensitivity of the DI.—*C. F. X. Youngberg.*

4047. Das, Rhea S. (Calcutta, India) **An alternative method of assessment for personnel selection using behavioral indices.** *Indian J. Psychol.*, 1958, 33, 259-278.—An O makes a quantitative rating of an applicant's performance on a model task.—*C. T. Morgan.*

4048. Ferguson, L. W. (Life Insurance Agency Management Ass., Hartford, Conn.) **Ability, interest, and aptitude.** *J. appl. Psychol.*, 1960, 44, 126-131.—Referring to published research, it is logically deduced and geometrically illustrated that there are grounds for the hypothesis that "in predicting success, the greater the time interval involved, the more important becomes interest and the less important becomes ability."—*J. W. Russell.*

4049. French, Cecil L. (U. Alberta, Canada) **Correlates of success in retail selling.** *Amer. J. Sociol.*, 1960, 66, 128-134.—In a retail sales group high production, as measured by sales volume and money earned, seems to depend on the individual's disposition to violate the group's norms. The tendency was correlated with downward occupational mobility and a higher reference group or stratum than his own.—*R. M. Frumkin.*

4050. Geisinger, K. W. (Temple U.) **The use of the sentence completion technique for the selection of salesmen: A methodological and validation study.** *Dissertation Abstr.*, 1960, 21, 1630.—Abstract.

4051. Germain, José; Pinillos, José L., Ramo, Mauricio, & Pascual, Marcelo. **Estudios sobre la selección de conductores en el Ejército del Aire.** [Studies on the selection of Air Force pilots.] *Rev. Psicol. gen. apl., Madrid*, 1958, 13, 767-790.—Finding the original battery for the selection of pilots at a pilots' school to have a validity coefficient of .11, new batteries were developed, cross-validated, and



factor-analyzed. Validity coefficients for the new batteries fluctuated around a value of .63. They showed satisfactory prediction of grades, failures, and drop-outs. Since the use of new batteries, suspensions from the school have declined. Cutting scores on the battery can be adjusted to meet the demand for new pilots as opposed to the available supply of candidates. Pilots can be selected psychometrically. Additional studies on this battery are planned.—*B. S. Aaronson.*

4052. Germain, José; Pinillos, José L., Ramo, Mauricio, & Pascual, Marcelo. *Selección de mecánicos de radio y radiotelegrafistas.* [Selection of radio mechanics and radiotelegraphers.] *Rev. Psicol. gen. apl., Madrid*, 1959, 14, 607-613.—Preliminary batteries chosen to predict aptitudes for radio mechanics and telegraphy in the Spanish Air Force seem very valid. These consist of tests of general intelligence, vocabulary, mechanical comprehension, electrical information, and arithmetic comprehension for mechanics; general information, discriminative reaction time, and visual memory for telegraphy; and radioelectrical information for both. Results are poorer for telegraphers than mechanics, and tests of sending and receiving should be added. A selection battery for admission to air force Communications school seems desirable and possible. The course division into stages poses special problems with regard to their effect on battery validity.—*B. S. Aaronson.*

4053. Germain, José; Pinillos, José L., Ramo, Mauricio, & Pascual, Marcelo. (Consejo Superior Investigaciones Científicas, Madrid, Spain) *Selección de pilotos en el Ejército del Aire español.* [Selection of pilots in the Spanish Air Force.] *Rev. Psicol. gen. apl., Madrid*, 1959, 14, 75-114.—A summary of test batteries used and results obtained in 3 schools for the selection of pilots for the Spanish Air Force. An adaptation of the battery used by the American Air Force has proved to be most valuable and can be considered an effective instrument for the selection of Spanish pilots. The corrected validity coefficient in 1 school, based on an N of 485, is .44 and in the 2nd school, with an N of 624, is .48. No validity coefficient is given for the 3rd school.—*B. S. Aaronson.*

4054. Gough, Harrison G. *Fakability of the Air Force Preference Inventory.* *USAF WADC tech. Note*, 1959, No. 59-199. vii, 15 p.—This study concerns: (a) recognition of the possibility of faking responses to the Air Force Preference Inventory in order to present a better impression, (b) a consideration of a possible index for detecting faking, and (c) an analysis of the psychological correlates of this index. An indication of faking was revealed by the comparison of 3 Air Force Preference Inventory scores made by an experimental sample of 30 college students tested under normal administration and then requested to fake. From inventory items showing marked differences in the 2nd testing, a dissimulation scoring key was constructed and applied to the college student sample and 2 air force officer samples. Significant differences were found between dissimulation scores of normal versus faked testing of the college student group and there was a negative correlation between the two sets of scores. Testing of additional samples, however, would be needed in

order to establish precise cutting points for distinguishing between authentic and faked test protocols.—*USAF WADC.*

4055. Harker, John B. *Cross validation of an IBM proof machine test battery.* *J. appl. Psychol.*, 1960, 44, 237-240.—In validating predictors of performance in bank clerical work, 53 proof machine operators, on whom predictors were tried, were followed up. Performance on a work sample was related to tests given concurrently. In the follow-up study, actual production items per hour were determined. The predictors of the first study were essentially accurate. "A multiple test battery with the requirement that two of the three tests be passed at the group median or better had a very good selective efficiency against both criteria and is recommended to increase production by almost 13%."—*J. W. Russell.*

4056. Himelstein, P., & Blaskovics, T. L. (U. Arkansas) *Prediction of an intermediate criterion of combat effectiveness with a biographical inventory.* *J. appl. Psychol.*, 1960, 44, 166-168.—If, according to biographical data, an individual has tended to engage in risky activities such as contact sports, playing poker, etc., will he also tend to be more effective in combat? Using a Risk Scale and a Peer Rating Scale, 57 seniors enrolled in Army ROTC courses were tested. The criterion was selection of combat and noncombat assignments. For combat effectiveness and leadership, the Risk Scale showed a significant difference in the expected direction.—*J. W. Russell.*

4057. Jensen, Milton B., & Morris, William E. (VA Center, Hot Springs, S. Dak.) *Supervisory ratings and attitudes.* *J. appl. Psychol.*, 1960, 44, 339-340.—Do supervisors tend to be biased in their ranking and rating of workers? 42 janitors were ranked and rated by 4 supervisors and rated by the division chief. The highest and lowest were compared by 10 factor scores. "Supervisors of our hospital maintenance men valued most the abilities least prevalent in the men (leadership and executive ability) and valued least the attributes most abundant in these men (social adjustment and personal charm)."—*J. W. Russell.*

4058. Judy, Chester J. *Relationships between available qualifications data and initial assignment.* *USAF WADC tech. Note*, 1959, No. 59-200. iii, 11 p.—The problem of this investigation was to determine how accurately initial assignment can be predicted from a knowledge of aptitudes, education, physical condition, and other supposedly relevant data routinely assembled on entering airmen. Multiple-regression analysis, using data on 2 1000-man groups who entered the Air Force in 1956, was used as the principal statistical procedure . . . [and] it was found that variables of the kind examined, altogether, can be used to explain from 30 to 47% of the variance in job family assignment, depending upon the particular job family considered. Aptitudes and counselor recommendations were found to play major roles in the prediction, but physical-profile data were of little value. Education variables, taken by themselves, were found to predict assignment, but they did not add significantly to the prediction from other available information.—*USAF WADC.*

4059. **Kirchner, W. K., McElwain, C. S., & Dunnette, M. D.** (Minnesota Mining & Manufacturing Co., St. Paul) **A note on the relationship between age and sales effectiveness.** *J. appl. Psychol.*, 1960, **44**, 92-93.—Manager's rankings of 539 salesmen converted into a stanine distribution and compared with chronological age showed that sales effectiveness increases until about 40 and then starts to decrease after that age. Even so, many older salesmen received high ratings.—*J. W. Russell.*

4060. **Kirchner, Wayne K.** (Minnesota Mining & Manufacturing Co., St. Paul) **Predicting ratings of sales success with objective performance information.** *J. appl. Psychol.*, 1960, **44**, 398-403.—What information about salesmen best predicts success in sales work as indicated by sales managers' appraisals of sales performance? To find out, 40 salesmen were studied for 6 months. "In all, 21 objective variables were intercorrelated with 19 appraisal variables. . . the best predictors of appraisal factors: Spot Orders, Spot Orders vs. Par, Shop Orders/Shop Calls, New Business Orders, and New Business Orders vs. Par." The procedures were considered very promising for trial by others.—*J. W. Russell.*

4061. **Kossack, Carl F., & Beckwith, Richard E.** (Purdue U.) **The mathematics of personnel utilization models.** *USAF WADC tech. Rep.*, 1959, No. 59-359 iii, 36 p.—Certain technical questions remain to be studied, but it is feasible to develop an air force personnel utilization model. Special attention was given "to the problem of estimating cost to the Air Force resulting from varied policies governing selection, classification, and training of personnel. An actual model is constructed, including definitions, flow diagrams, and an illustration showing application of the model to the problem of personnel distribution of airmen during their first four years of service. A further development presents a specialization of a general model, using the mathematics of Markovian processes." (16 ref.)—*M. B. Mitchell.*

4062. **McGrath, James J.** (Human Factors Research, Los Angeles, Calif.) **Improving credit evaluation with a weighted application blank.** *J. appl. Psychol.*, 1960, **44**, 325-328.—Using data from a credit application blank, how can poor credit risks be most effectively identified? 100 records of those who paid for their cars were compared with a like number of records of those who failed to do so. An item analysis was performed and weights assigned to items according to their ability to differentiate between the 2 sets of records. 24 items were chosen as working especially well. "A formula was presented which allows the profit obtaining from the use of any particular cut-off score to be estimated."—*J. W. Russell.*

4063. **Mason, P. L., & Casey, D. L.** **The use of psychological tests for selecting tabulating machine operators.** *Personnel pract. Bull.*, 1960, **16** (3), 39-41.—5 tests were given 74 trainees in tabulating machine work. Criteria were rank in class and a rating of ability to do the job after 6 months on the job. Tests of verbal reasoning and mathematical ability yielded the highest correlations with the criteria. Is it felt that the tests were an aid in selection.—*J. L. Walker.*

4064. **Merenda, P. F., Farrington, A. D., & Clarke, W. V.** (Walter V. Clarke Associates, East Providence, R. I.) **Prediction of performance of textile workers.** *Engng. industr. Psychol.*, 1959, **1**, 120-127.—Pearson *r*'s between an employment interviewer's predictions and foremen's performance ratings at the end of 30 and 90 days were .37 and .24, respectively. For a trained analyst using the Activity Vector Analysis Test the *r*'s were .40 and .45, respectively. All were significantly different from zero. Tetrachoric correlations between predicted and actual performance at the end of 25 mon. were .34 for 79 Ss on which interviewer predictions were available and .44 for the AVA scores of the same Ss. For a larger sample of 230 Ss the validity coefficient was .57 using the AVA.—*C. F. X. Youngberg.*

4065. **Mosel, J. N., Fine, S. A., & Boling, J.** (George Washington U.) **The scalability of estimated worker requirements.** *J. appl. Psychol.*, 1960, **44**, 156-160.—Construction of rating scales and check lists in job analysis can be done with the help of people who make judgments about dimensions for the categories. Can this scalability be made acceptable, and is doing it a general ability or one that is highly specific to the requirement? "Seven experienced and trained job analysts of the United States Employment Service rated 50 jobs on 33 requirements grouped into three classes: (a) aptitudes, (b) interests, and (c) personality. Analysts were provided with definitions of each requirement, together with 'bench mark' jobs to serve as guiding examples." Most of (a),  $\frac{1}{2}$  of (b), and about  $\frac{1}{3}$  of (c) were scalable. "... analyst sensitivity is not a general ability but is highly specific to the requirement."—*J. W. Russell.*

4066. **Parker, James F., Jr., & Fleishman, Edwin A.** (Psychological Research Associates, Inc., Arlington, Va.) **Prediction of advanced levels of proficiency in a complex tracking task.** *USAF WADC tech. Rep.*, 1959, No. 59-255. vi, 57 p.—A battery of 21 printed and 23 apparatus psychomotor reference tests were given to 203 AFROTC Ss. From intercorrelations of scores on these tests 15 ability factors were identified. These accounted for only a small portion of the variance in a tracking performance which roughly simulated that performed by a pilot during the attack phase of an airborne radar intercept mission. The tests, however, were more predictive of performance after 17 sessions than were the early trials on the criterion task itself. Spatial orientation abilities were more important in the early sessions than later. Coordination ability became more important as learning progressed. (23 ref.)—*M. B. Mitchell.*

4067. **Rasch, P. J., & Pierson, W. R.** (Coll. Osteopathic Physicians & Surgeons, Los Angeles, Calif.) **Evaluation of a submaximal test for estimating physical work capacity.** *Ergonomics*, 1960, **3**, 9-16.—"The Bruce Physical Fitness Index has been suggested as an improved way of evaluating fitness. The Index was tested experimentally on several groups and found to be inadequate because of low correlations with performance and large individual variations."—*B. T. Jensen.*

4068. **Ruch, Floyd L., & Ruch, William W.** (U. Southern California) **Predicting success in**

draftsman training with short time limit aptitude tests. *Educ. psychol. Measmt.*, 1960, 20, 827-833.—5 of the 7 subtests in the Employee Aptitude Survey had significant correlations with instructor's ratings of technical proficiency in engineering drawing. The tests and training program are briefly described.—W. Coleman.

4069. Schmale, H., & Schmidtke, H. (Dortmund, Rheinlanddamm 201, Germany) **Optische Reaktionszeit als leistungsbegrenzender Faktor bei Kontrolltätigkeiten.** [Optical reaction time as a delimiting factor in performance in precision work.] *Psychol. u. Prax.*, 1960, 4, 147-156.—The relationship between measures of visual acuity and optical reaction time and quality and quantity of work output of 91 sorters in a paper factory was investigated. The sorters' task was to detect imperfections in the finished product. No relationship was found. The short duration of the experiment was suggested as a factor in the outcome.—H. Roemmich.

4070. Shouksmith, G. **A validity criterion for a group selection procedure.** *Aust. J. Psychol.*, 1960, 12, 34-39.—Difficulties have been encountered in finding validation criteria for group selection procedures. In this study the investigator had the task of choosing airline pilots for a national corporation. 3 criteria were employed. The 1st was a measure of wastage or loss of candidates after 1 year with the airline. This criterion showed that the new selection procedure was better in keeping out undesirable but it told nothing of the relative merits of individual pilots. The 2nd criterion was assessment of performance during ground school and flying training. The 3rd criterion was the assignment of trainees to "verbally predefined categories." Only the 3rd criterion proved to be of general value.—P. E. Lichtenstein.

4071. Taylor, Erwin K., & Parker, James W. (Personnel Research & Development Corp., Cleveland, O.) **Spatial tests as predictors of success in Air Force training.** *USAF WADC tech. Rep.*, 1959, No. 59-361. vi, 38 p.—20 spatial tests were given to over 2200 airmen in an attempt to find better predictors than the 2 spatial ability tests now used in the Airman Classification Battery. Results were quite negative but "Factor analysis indicated that a heterogeneous test was a better measure of spatial ability than were tests composed of homogeneous items. Of the final school grades as criteria, those for Aircraft Mechanic were most predictable both from Airman Classification Battery tests and from the spatial tests. Of the spatial battery tests, the most promising for a place in a differential classification battery is the heterogeneous subtest, Space Survey I. This had high individual validity for mechanical training but generally lower validity for other training." A composite including academic ability, verbal facility, and ability to handle abstractions is the best predictor of success in technical school.—M. B. Mitchell.

4072. Trites, David K. (Civil Aeromedical Research Inst., Federal Aviation Agency) **Adaptability measures as predictors of performance ratings.** *J. appl. Psychol.*, 1960, 44, 349-353.—How well do measures of temperamental and motivational characteristics in training predict success of performance

of officers as indicated by Officer Effectiveness Ratings? S were selected from 666 cadets at one base and 69 at another. Variables used were 3 global indices of adaptability and 10 variables representing the common factors. "(a) measures of adaptability to training and Air Force Life are more highly related to later officer performance than are measures of aptitude or ability; (b) assessments of a man's functioning involving personal judgments of peers, superiors, and experts are predictive of later performance as an Air Force officer."—J. W. Russell.

4073. Waters, Lawrence K., & Wherry, Robert J., Jr. **Factor analysis of selection tests and performance measures in U.S. Naval School, Pre-Flight.** *USN Sch. Aviat. Med. res. Rep.*, 1959, Proj. No. MR005.13-3003, Sub. 10, No. 2. ii, 11 p.—"A 19 variable matrix representing the relations among selection test scores (Aviation Qualification Test, Mechanical Comprehension Test, and Spatial Apperception Test), course performance in U.S. Naval School, Pre-Flight, and a peer rating of officer potential was factor analyzed. Six factors, extracted and rotated to an orthogonal solution, were identified as figure manipulation, mathematical skills, clerical speed and accuracy, verbal facility, program motivation, and academic motivation. The mathematics subtest of the Aviation Qualification Test combined with the Mechanical Comprehension Test was predictive of technical course performance. The vocabulary subtest of the Aviation Qualification Test was predictive of academic non-technical courses. None of the selection tests was of practical importance in predicting military and physical training grades."—L. Shatin.

(See also Abstracts 3403, 4035, 4133)

#### TRAINING

4074. Alexander, L. T., Ford, J. D., Jr., Jensen, B. T., Jordan, N., & Rogers, M. S. (System Development Corp.) **Problems encountered in developing and maintaining a field system training program.** Santa Monica, Calif.: System Development Corporation, 1959. 21 p.—5 papers concerned with requirements for a training program (L. T. Alexander), the contribution of simulation (M. S. Rogers), feedback and debriefing procedures (N. Jordan), the military culture (B. T. Jensen), and training in man-machine systems of the future (J. D. Ford, Jr.)—B. T. Jensen.

4075. Clegg, William C. (U. Toronto, Canada) **The effectiveness of practice in simulated situations as training for actual use of a skill.** *Ontario J. educ. Res.*, 1959-60, 2, 1-13.—"The findings of this study in relation to the field of synthetic trainers are complex and varied. The various groups of subjects do not differ in terms of accuracy scores and we may conclude that, from the point of view of skilled tasks, training on simple apparatus and simple tasks would be as effective as training on complex simulations of operational tasks."—C. T. Morgan.

4076. Cline, Victor B., Beals, Alan R., & Seidman, Dennis. (U. Utah) **Experimenting with accelerated training programs for men of various intelligence levels.** *Educ. psychol. Measmt.*, 1960, 20, 723-735.—Army recruits of above average intellectual ability were able to learn as much cognitive

verbal type material in 4 weeks as a comparable group learned in 8 weeks. In performance tests involving manipulative skills, men of middle and low intelligence required 8 weeks to learn the required skills. For physical fitness and rifle marksmanship all levels profited from longer training.—*W. Coleman*.

4077. Dudden, Arthur P. (Bryn Mawr Coll.) **The organization man: As student.** *Personnel J.*, 1960, 38, 286-291.—The Institute of Humanistic Studies for Executives was established in 1953 at the University of Pennsylvania to train Bell System middle-management men for top management positions. Morris S. Viteles has administered tests and questionnaires to the students before and after 9 months in liberal arts. "... test results clearly support the view that participants have acquired increased understanding of the nature and history of social, economic, and political institutions, and of the problems arising in relation to them. In this respect, they have become better prepared to deal with ... problems of contemporary society ... and of the role of business in modern society." As to their attitudes and values there was no change in political and religious values, but there was an increased interest in aesthetic values with a corresponding decrease of emphasis on economic values. The program is considered so successful that it will be opened to employees of other companies, and several other colleges are now offering similar programs for executives with a technical background.—*M. B. Mitchell*.

4078. Jensen, B. T., Terebinski, S. J., & Ellis, W. R. (System Development Corp.) **The importance of criterion definition.** *J. Amer. Soc. Train. Directors*, 1960, 2, 3-7.—Describes functions of criteria and the need for good definitions. After indicating levels of criteria and their relationships, the authors give 3 examples from laboratory and field research of the criterion problem.—*Author abstract*.

4079. Kolstoe, O. P. (Southern Illinois U.) **The employment evaluation and training program.** *Amer. J. ment. Defic.*, 1960, 65, 17-31.—"The Employment Evaluation and Training Project is an 18 week residential program for mentally handicapped males 16 years of age and older. It is designed to assess and increase the intellectual, personal, social, and vocational skills of the trainees. The first three weeks is an evaluation of skills in light industrial, business and service areas. The final 15 weeks is an evaluation of the use of these skills in five different work situations for three weeks each. Work placement and follow-up are provided after the trainee leaves the project."—*Author summary*.

4080. Mukherjee, Bishwa N. (Patna, Bihar State, India) **Learning efficiency in a psychomotor test as a function of initial skill.** *Engng. Industr. Psychol.*, 1959, 1, 138-142.—Of 4 groups of Ss at varying levels of initial skill, those with originally superior ability attained the highest level of proficiency and reached the criterion trial sooner. Ss with low try-out scores showed greater improvement in terms of absolute and relative gain indices.—*C. F. X. Youngberg*.

4081. Neel, Robert G., & Dunn, Robert E. (U. Kansas City) **Predicting success in supervisory**

**training programs by the use of psychological tests.** *J. appl. Psychol.*, 1960, 44, 358-360.—How valid are the Wonderlic, How Supervise?, and the F scale in predicting success in supervisory training programs? S were students in a supervisory training course in a night school. The criterion was the grade received in the course. "It can be concluded that in this preselected homogeneous group the use of the How Supervise? Scale and the F Scale predicts with a high degree of accuracy those who are able to successfully complete a supervisory training course." Early in the course, the Wonderlic had predictive value but not later.—*J. W. Russell*.

#### MOTIVATION & ATTITUDES

4082. Bair, John T. (United States Naval School of Aviation Medicine, Pensacola, Fla.) **Attitudes of navy midshipmen toward aviation.** *Aerospace Med.*, 1960, 31, 57-60.—A training program is assessed in terms of its ability to alter the attitude of navy midshipmen to an aviation career in the Navy. Several hundred midshipmen were given a questionnaire before and after indoctrination program. Indoctrination did influence their attitudes towards aviation.—*A. Debons*.

4083. Chew, W. B., & Howell, L. E. (General Motors Corp., Detroit, Mich.) **New light on trait rating.** *Personnel*, 1960, 37, 42-46.—This study on trait rating involved 4 steps: (a) the collection of words and phrases traditionally employed in industry to describe personal characteristics on rating forms, (b) development of an 80-item checklist from these words and phrases, (c) use of this list to obtain ratings by supervisors of their employees for a homogeneous group of industrial jobs, (d) classification of the 80 words and phrases into homogeneous sets.—*V. M. Staudt-Sexton*.

4084. Faunce, W. A. **Social stratification and attitude toward change in job content.** *Soc. Forces*, 1960, 39, 140-148.—Questionnaire responses from 295 employees of a medium-sized insurance company were analyzed to determine "the association between a series of variables related to social stratification and attitudes toward change in one's job." These associations are discussed.—*A. R. Howard*.

4085. Ganguly, Topodhan. (Calcutta, India) **Group participation as an effective technique to improve the industrial worker's attitude and morale: An experiment.** *Indian J. Psychol.*, 1958, 33, 25-36.—An attitude survey was given to control and experimental groups before and after the experimental group underwent a program of interpretative group discussion accompanied with audio-visual aids. There was a significant improvement in the attitude of the experimental group.—*C. T. Morgan*.

4086. Hardin, Einar, & Hershey, Gerald L. (Mich. State U.) **Accuracy of employee reports on changes in pay.** *J. appl. Psychol.*, 1960, 44, 269-275.—To test the validity of perceived change measures, questionnaires were administered to 246 employees before and after automation. Actual and perceived change in pay was the one aspect of change studied. "Data are presented on the degree of accuracy of employee reports, on the nature of the deviations between reports and actuality, and on



the relationship of the deviations to potential explanatory variables."—*J. W. Russell.*

4087. Hoppock, Robert. (New York U.) **A twenty-seven year follow-up on job satisfaction of employed adults.** *Personnel guid. J.*, 1960, 38, 489-492.—Job satisfaction scores of 23 employed adults were followed up. There appears to be a positive relationship between job satisfaction and age. The greatest increases in job satisfaction were shown by adults who changed jobs.—*S. Kavruck.*

4088. King, Donald C. (Purdue U.) **A multi-plant factor analysis of employees' attitudes toward their company.** *J. appl. Psychol.*, 1960, 44, 241-243.—Is an attitude questionnaire designed to measure a specific attitude unifactorial? If not, what is the nature of the factors? 735 mailed questionnaires, representing a 50% return, were analyzed. Although designed to measure one thing, attitude toward the company, it was found to contain a large general factor of general attitude or bias toward the company. 1 of the other 3 factors found was respect for personal rights; the 3rd was opportunity for self improvement. The factorial structure of employees' work attitudes may be more complex than previously thought.—*J. W. Russell.*

4089. McLean, Alan A. (IBM Corp.) **Emotional problems of businessmen.** *Adv. Mgmt.*, 1960, 25(9), 9-10.—Acknowledging the complex pressures of the social environment in which the modern executive finds himself, men in responsible positions in industry are better able to meet stresses of their occupational environment without breakdown than individuals of lesser occupational rank. Why? because of (a) the total person in the total environment; (b) critical conditioning factors in the individual's development and family background; and (c) strong unconscious bonds of identification formed in early childhood make dominant contributions to later occupation choice, goals, and success of an individual. From such individual developmental backgrounds come individual strengths, often well under the surface, allowing each man to call forth emotional energy and patterns of defense against a stressful job situation. These subtle personality characteristics, not apparent to social scientists' research, appear to be instrumental in preventing symptoms of very serious illness.—*E. Q. Miller.*

4090. Meade, Robert D. (Trinity Coll., Hartford, Conn.) **Time on their hands.** *Personnel J.*, 1960, 39, 130-132.—Morale may be improved if time can be made subjectively to pass faster for employees. Factors that seem "necessary for changing the apparent length of a period of time are, (a) the presence of some definite end point in a task toward which an individual is working, (b) motivation to reach the end point or goal, and (c) feed-back of information from the task itself in reference to progress toward attaining the goal in question."—*M. B. Mitchell.*

4091. Megginson, L. C. (Louisiana State U.) **The human consequences of office automation.** *Personnel*, 1960, 37(5), 18-26.—A realistic presentation is given of the impact of computers on work organization, job content, and manpower needs, based on industry's experience over the past 12 years. The author reminds that many early hopes and fears

aroused by the introduction of office automation have proved unfounded.—*V. M. Staudt.*

4092. Meltzer, H. **Workers' perceptual stereotypes of age differences.** *Percept. mot. Skills*, 1960, 11, 89.—The perceptual stereotypes of "300 men and women workers of all ages under the same management and with the same work philosophy, located in three different regions of the United States—Northeast, Midwest, and Far West—were studied. The age spans . . . were: up to 20, 20 to 35, 35 to 45, 45 to 60, and 60 up. . . . The most outstanding fact is . . . the general unfavorable attitude toward age and aging on the part of workers, regardless of differences in their attitudes toward earlier years."—*C. H. Ammons.*

4093. Miller, Kenneth M. (U. Tasmania, Australia) **The measurement of vocational interests by a stereotype ranking method.** *J. appl. Psychol.*, 1960, 44, 169-171.—An interest test based on the assumption that interests reflect stereotypes is described. Employing job titles to be checked, it is intended for use as the basis for an interview but can be used with norms. "It can be administered to groups or individuals, is relatively quick and has been shown to have promising reliability and validity, though more evidence on these aspects is required."—*J. W. Russell.*

4094. Miner, John B. (U. Oregon) **The effect of a course in psychology on the attitudes of research and development supervisors.** *J. appl. Psychol.*, 1960, 44, 224-232.—In comparing lecture and nondirective approaches to changing group attitudes, 72 corporation supervisors taking a psychology course were subjected to pre and posttest comparisons of attitudes toward the supervisory role using a sentence completion test with both experimental and control groups. Negative findings involving a worsening of attitudes in the control group was attributed to group solidarity stimulated by threat of competition being forced upon them from without. The lecture method and emphasis on research findings produced improved attitudes toward supervisory work. (19 ref.)—*J. W. Russell.*

4095. Obrochta, R. J. (Convair, San Diego, Calif.) **Foremen worker attitude patterns.** *J. appl. Psychol.*, 1960, 44, 88-91.—How do the attitudes and behavior of supervisors affect those of workers? Using attitude ratings of recorded interviews in manuscript form, attitudes of foremen and workers were compared according to variables such as company, job foreman, workers, union, and union leadership by the author and research associates. "No significant difference was found to indicate that if a foreman and a worker like each other they will tend to share attitudes toward the company, job, union, and union leaders."—*J. W. Russell.*

4096. Pelz, D. C. (U. Michigan) **Interaction and attitudes between scientists and the auxiliary staff: II. Viewpoint of scientists.** *Admin. sci. Quart.*, 1960, 4, 410-425.—Data from 338 scientists show how their attitudes on the adequacy of various auxiliary services are related to the central or divisional source of services, to use of direct or indirect channels, and to the use of personal or written contact. The role of the divisional administrative office is also discussed. The author examines the

implications for practical problems (such as centralization of services) and for the concept of control in organizations.—V. M. Staudt.

4097. Plummer, Norman. (New York Telephone Co.) **Absenteeism in industry.** *Advanc. Mgmt.*, 1960, 25(9), 21-24.—Through analysis of statistics concerning absenteeism for illness with the New York Telephone Co. the author observes that with both men and women employees about  $\frac{1}{3}$  of the group accounts for  $\frac{1}{2}$  of the absences. If, as is generally accepted, absenteeism furnishes an index of the quality of personnel practices, and morale, this type of analysis yields the focal point of administrative problems. The author includes 6 charts showing frequency of absence, cause of absence, ratio of absence, each by sex; and the total cost of absenteeism in his company for 1958.—E. Q. Miller.

4098. Robinson, H. Alan, & Connors, Ralph P. **Job satisfaction researches of 1959.** *Personnel guid. J.*, 1960, 39, 47-52.—The 18th report of the series covering job satisfaction research for 1959 is presented. (26-item bibliogr.)—S. Kavruck.

4099. Shatin, Leo. (Seton Hall Coll. Medicine Dentistry) **Motivation: The will to work.** *Amer. Arch. rehabilit. Ther.*, 1960, 8(1), 17-24.—The conscious and unconscious attitudes which adversely influence the will to work are described.—L. Shatin.

4100. Shaw, D. M. (Duke U.) **Size of share in task and motivation in work groups.** *Sociometry*, 1960, 23, 203-208.—"An experiment was conducted to test the hypotheses that high task motivation is a function of (a) large individual shares in group tasks and (b) identifiability of individual contributions to group products. Subjects . . . were 136 female undergraduates recruited from classes at a state university. The following results were obtained: First, subjects with large shares in the group task showed higher task motivation than did subjects with small shares, as hypothesized; and second, identifiability of individual contributions to the group task was not significantly related to task motivation. There was some indication that the results may reflect inadequacy of manipulation of identifiability as a variable, and should therefore not be construed as a refutation of the second hypothesis."—H. P. Shelley.

4101. Singer, Henry A. (Remington Rand Univac) **The management of stress.** *Advanc. Mgmt.*, 1960, 25(9), 11-13.—A brief resume of the current thinking on the topic of stress in industry considering its nature, industrial climate, accidents, alcoholism and means of reducing stress.—E. Q. Miller.

4102. Stone, V. W. (Maryland State Coll.) **Measured vocational interests in relation to intraoccupational proficiency.** *J. appl. Psychol.*, 1960, 44, 78-82.—What is the relationship between vocational interests and occupational proficiency? Based on a study of shorthand skill involving 1100 female students, the data were subjected to statistical tests of significance and the linear regression predictive technique for cross-validation purposes. Tests employed included an interest inventory, a shorthand proficiency test, and an intelligence test plus a scale constructed to differentiate responses of superior and inferior criterion groups. The latter "worked": "Members of an occupational group can be classified

on the basis of interests, with respect to quality of occupational performance."—J. W. Russell.

4103. Veil, Claude. **La rémunération du travail.** [Remuneration for work.] *Hyg. ment.*, 1960, 49, 34-51.—A report to the French League of Mental Health on the psychological consequences of various ways of adjusting salaries. Principles of adjustment according to work, need, and capacity are discussed. An effectively equitable salary is not inaccessible, if the more serious and banal mistakes are avoided. Salaries, which the workers feel are inequitable, are sources of anxiety, frustration, and conflict.—W. W. Meissner.

4104. White, B. L. **Job attitudes, absence from work, and labour turnover.** *Personnel pract. Bull.*, 1960, 16(4), 18-23.—A study of the relationship between the factors noted above in a chemical manufacturing plant employing 160 people (30 were females) revealed that low morale caused absence and quitting.—J. L. Walker.

4105. Yuker, H. E., Campbell, W. J., & Block, J. R. (Human Resources Found., Albertson, N.Y.) **The will to work.** *Personnel*, 1960, 37(5), 49-55.—The experience of a company that hires only people so severely handicapped that they cannot get jobs anywhere else is described. Its experience is considered as having 3 major implications for the employment of physically normal workers: (a) Motivation is probably the key to the selection of good workers. (b) While a perfect attendance record is seldom possible, absence from work is often the result of a borderline decision. (c) The fact that a group of disabled workers in a competitive industrial situation has a significantly better safety record than most groups of physically normal workers suggests that one of the most crucial factors in safety is attitude.—V. M. Staudt.

(See also Abstracts 3514, 4026, 4128)

#### MANAGEMENT & ORGANIZATION

4106. Argyris, Chris. (Yale U.) **Organizational effectiveness under stress.** *Harv. bus. Rev.*, 1960, 38, 137-146.—Among the various philosophies which may guide executives in their attempts to reach the organization's objectives are the "let's be nice" approach and the "let's put on the pressure" viewpoint. What the results will be in terms of productivity, absenteeism, turnover, morale, and the like will depend in part upon the business climate in which the company is operating. The pressure approach does not work well at all. The "being nice" philosophy may be appropriate for the organization that is coasting along, but not for the company aiming at growth, expansion, and efficiency.—C. F. Youngberg.

4107. Barnes, Louis B. (Harvard U.) **Organizational systems and engineering groups: A comparative study of two technical groups in industry.** Boston, Mass.: Harvard Univ., 1960. xv, 190 p. \$3.50.—"This study represents an effort to learn more about the forces that make people behave the way they do in organizations, a problem that has long puzzled management. Two groups or departments of about 30 people each, within separate companies, were the subjects. Relationships affecting management, engineering supervisors, and engi-

neering groups were observed, predicted, explored and described. Findings are compared and implications suggested for management and behavioral scientists." (25 ref.)—*M. C. Benton.*

4108. Bass, B. M. (Louisiana State U.) **The management training laboratory.** *Advanc. Mgmt.*, 1960, 25(7), 11-15.—To combat 5 problems of large formal organizations (unsatisfying jobs, divergence of goals of different levels, intolerance of criticism, poor communications, rigidity in facing new problems), the author advocates the formation of small groups of 8-15 members, completely nondirected and cutting diagonally across an organization, which meet for 15-20 2-hour sessions over a period of 1-2 weeks. These groups set their own integrated goals, each member takes appropriate action when needed, adequate communications are established, a wide variety of behavior is permitted, they stay flexible in organization, and they make the most appropriate use of their resources. This technique of management development has been in operation for 10 years by the National Training Laboratories, New York.—*E. Q. Miller.*

4109. Beach, Dale S. (Rensselaer Polytechnic Inst.) **An organizational problem: Subordinate-superior relations.** *Advanc. Mgmt.*, 1960, 25(12), 12-14.—The author advocates a grievance procedure or other system of judicial review for nonunion employees including supervisors and managers. The suggestion includes a step for arbitration.—*E. Q. Miller.*

4110. Berwitz, Clement J. (New York State Dept. Labor) **Beyond motivation.** *Harv. bus. Rev.*, 1960, 38, 123-125.—In the design of management development programs, in encouraging non-directive counseling, in attempting to understand informal cliques in the industrial setting, personnel specialists tend to "give" the worker participation rather than "letting" him participate, and communicate "at" him rather than "with" him. The application of research findings may lead to an "artificially" developed man rather than a "self-realized" man.—*C. F. Youngberg.*

4111. Brown, Milon. **Effective work management.** New York: Macmillan, 1960. ix, 246 p. \$5.00.—The real purpose of this book is to help, primarily, middle-level executives and young people hoping to become executives understand what is meant by management in connection with work. Information about the management process is given in a 5-part discussion of inter-related facts. Subject groupings are: "The Meaning of Management," "Planning and Making Sound Decisions," "Executive Action," "Management Control," and "Applying the Management Process."—*M. C. Benton.*

4112. Brown, Wilfred. (London, England) **Exploration in management.** New York: John Wiley, 1960. xxii, 326 p. \$6.00.—The author presents a philosophy of management (that an industrial organization functions as a sociotechnical system) developed during his 20 years as chief executive of a light engineering company in England. The present organization, policies and procedures have been influenced both by a continuing program of social science research and by executive action based on economic necessity. He discusses organization struc-

ture, policy, communication, and the function of the specialist. He examines in some detail the gap at the bottom of the executive system and the sources of management authority. (A glossary of technical terms, the Company Policy Document, & a 22-item bibliogr.)—*M. L. Kelly.*

4113. Butler, W. P. **A study in communication.** *Personnel pract. Bull.*, 1960, 16(3), 18-26.—The daily communications of 19 executives and supervisors in a plant employing 400 people were studied over an 18-day period. The procedure is described and the results analyzed. It is concluded that skill in communication is important for such men because of the amount of time spent in it.—*J. L. Walker.*

4114. Caldwell, James W. (Pennsylvania State U.) **Management skills for scientists in supervision.** *Advanc. Mgmt.*, 1959, 24(4), 22-26.—A discussion and summary of points made by speakers in a one-week seminar on "R & D Management Development."—*C. T. Morgan.*

4115. Collier, Abram T. (John Hancock Life Insurance Co.) **Debate at Wickersham Mills.** *Harv. bus. Rev.*, 1960, 38, 49-63.—In terms of 4 sets of organizational objectives and the means of attaining them, the candidates for president of one company present their viewpoints in the form of a one-act play. The stockholders at this meeting, moderated by a university professor, are asked to cast their votes and the readers are encouraged to do likewise through ballots inserted in the magazine.—*C. F. Youngberg.*

4116. Dugan, R. D. (State Farm Insurance Co., Bloomington, Ill.) **Evaluating territorial sales efforts.** *J. appl. Psychol.*, 1960, 44, 107-110.—"The purpose of this investigation was to provide a better method of evaluating the sales efforts of different state sales organizations in the marketing of automobile insurance. Nineteen measures representing quantitative production achievements, manpower statistics, over-all market statistics, amount of business in the area, and combinations of these were factor analyzed. Five factors emerged, two of which were not evaluative measures and three that might ultimately be used as such. The five factors were: Absolute Size, Potential per Agent, Over-all Effectiveness, Manpower Utilization, and Rate of Growth. Although the first two factors were not directly associated with the evaluation of the states, their presence gave some additional knowledge about the other three factors."—*Author summary.*

4117. Elijah, Leo M. (George Sall Metals Co., Inc.) **Aggressive leadership: A management resource.** *Advanc. Mgmt.*, 1960, 25(12), 26-28.—"In almost every organization there exist the very men that top management is searching for, but they are given other jobs." There is in general no "attempt to uncover and develop the immense wealth of uncut, untried talent waiting to be picked from within an organization's own ranks." The article concludes with a check list rating of the organization's effectiveness.—*E. Q. Miller.*

4118. Glover, John D., & Lawrence, Paul R. **A case study of high level administration in a large organization.** Boston, Mass.: Harvard Univ. Grad. School Business Administration, 1960. vi, 120 p. \$2.00.—After 4 years of operation of the

Office of the Assistant Secretary of the Air Force (Management), concrete experiences, successes, and failures of the office were studied. Observations reported concern environment; functions and relationships of the office; patterns of administrative attitude, behavior, and results; and the role and place of the office in the Air Force organization. Comments, conclusions, and implications re-emphasize facts already widely accepted as major management problems, namely, keeping perspective and working effectively with others. Students of administration will be enlightened by the ways and means of managing these problems as reported in this case study.—*M. C. Benton.*

4119. Hall, Edward T. (Washington School Psychiatry) **The silent language in overseas business.** *Harv. bus. Rev.*, 1960, 38, 87-96.—For the executive wishing to do business in foreign countries, of equal if not greater importance than learning the physical language is the understanding of 5 other aspects of communication: the languages of time, space, material possessions, friendship, and agreements.—*C. F. Youngberg.*

4120. Jackson, Jay M. (U. Kansas) **The organization and its communications problem.** *Advanc. Mgmt.*, 1959, 24(2), 17-20.—There are "four problems which people in organizations must solve in order to overcome barriers to communication": (a) of trust or lack of trust, (b) of creating interdependence among persons, (c) of distributing rewards fairly, and (d) of understanding and coming to common agreement about the social structure of the organization.—*C. T. Morgan.*

4121. Katz, Robert L. (Harvard U.) **Steps in determining effective administrative action.** *Advanc. Mgmt.*, 1959, 24(2), 12-16.—A detailed outline is presented for steps in determining action, aids to analysis of the situation, and clues to the quality of the solution.—*C. T. Morgan.*

4122. Kaufman, Herbert. (Yale U.) **The forest ranger: A study in administrative behavior.** Baltimore, Md.: Johns Hopkins Press, 1960. xviii, 259 p. \$5.00.—Research on administrative behavior based on intensive study of 5 United States Forest Service District Rangers using "standard techniques of the political scientist" and a "pattern of data gathering . . . that followed the anthropological pattern. . . . Three things emerge (from this research). One is a description of the administration of the national forests as an individual operation that gives some fresh insights into the behavioral dynamics of a specific large-scale organization. The second is a set of generalizations about organizations in general, propositions that can be tested against the experience of other organizations of all kinds. The third is a series of conclusions about the utility of looking at organizations from the viewpoint here proposed and attempted."—*P. C. Apostolakis.*

4123. Kelsall, E. P. **Psychological aspects of the failure of arbitration in Australia.** *Aust. J. Psychol.*, 1960, 12, 89-100.—The author discusses some of the most serious deficiencies and needed changes in the arbitration system in Australia. An understanding of psychological and sociological components of industrial conflict is held to be essential

to fundamental improvements in arbitration procedures.—*P. E. Lichtenstein.*

4124. McGregor, Douglas. (Massachusetts Inst. Technology) **The human side of enterprise.** New York: McGraw-Hill, 1960. x, 246 p. \$4.95.—The basic assumptions about human nature and human behavior implied in the traditional approach to organization and management with the stress on direction and external control are compared with a proposed set of assumptions with the stress on integration and self-control. The implications for management in performance appraisal, salary administration, staff-line relationships, leadership, management development programs and other areas are discussed. Examples are used to illustrate and clarify points made. Selected references follow each of 16 chapters, but no specific references are made to document the material presented.—*T. R. Lindbom.*

4125. McNeill, W. I. (Chamber Commerce, Hartford, Conn.) **Advances in human relations vs. advances in science and technology.** *Advanc. Mgmt.*, 1960, 25(7), 16-19.—The author deplores the lag in progress between technology and human relations management. He suggests specifications for an ideal leader and weights each specification: character, intellectual honesty, dependability, moral courage—25%; previous success with subordinates—15%; sense of proportion, common sense, judgment, diplomacy, personality—15%; administrative and organizational success—15%; success in developing subordinates—15%; knowledge of details of business—10%; creativeness—5%.—*E. Q. Miller.*

4126. Malcolm, Donald G., & Rowe, Alan J. **Management control systems.** New York: Wiley, 1960, xvii, 375 p. \$7.25.—"A symposium on Management Information and Control Systems held at the System Development Corporation in Santa Monica, California, on July 29-31, 1959, was called to explore the present state of the art, likely future developments, and the need for research in the field. This book includes the papers which were presented at that meeting and a summary of the discussions that were conducted." The papers and remarks of the 22 symposium speakers from industry, education, and government are grouped into 7 sections. 1 paper deals with the opportunity for innovation in management controls; 4 papers concern present status of the concept of controls; 2 center around the impact of computers on the design controls; 3 discuss examples of automated controls; 5 are given to future possibilities in management controls and information systems; 5 others deal with research in control system design; and, 2 talks summarize and conclude the symposium.—*R. E. Chandler.*

4127. Mann, Floyd C., & Hoffmann, L. Richard. (U. Michigan) **Automation and the worker: A study of social change in power plants.** New York: Henry Holt, 1960. xiv, 272 p. \$4.50.—The social and psychological effects of automation upon the workers and organizations of power plants were investigated in a controlled study of 2 plants, one of which was automated. 4 of the seven chapters concern the consequences of automation on the total organization of the plants, job changes accompanying automation, problems associated with shift work, and various aspects of supervision. Other chapters discuss the characteristics of automation and approaches



to studying it, describe the study setting and the design of the project itself, and discuss the administrative and research implications of the project. (5 appendices, 29-item bibliogr.)—*R. E. Chandler.*

4128. Rosen, Hjalmar, & Weaver, Charles G. (U. Illinois) **Motivation in management: A study of four managerial levels.** *J. appl. Psychol.*, 1960, 44, 386-392.—Can managers be properly spoken of as a class? 155 managers responded to a questionnaire about their work. "Within the four levels of management studied, there was a high degree of commonality regarding conditions of work considered to be important. . . . In a sense, then, perhaps one can accurately talk about 'management' as a meaningful, cohesive class sharing common motivations regarding what they want from their work, if their responsibilities are defined in terms of job rather than organizational effectiveness."—*J. W. Russell.*

4129. Rowland, Virgil K. (American Management Ass.) **Managerial performance standards.** New York: American Management Association, 1960. 192 p. \$5.25.—An AMA handbook for operating executives which describes a conference technique for the development of job descriptions followed by the definition of relevant performance criteria. Participants in the conference are the incumbents of the job being described. The leader must be the line manager who is their immediate superior. Sessions begin with brainstorming and proceed through directed discussion until the material is organized and agreement is reached. Applications of the method to first line, middle management and top level jobs are described separately. The function of a staff man as coach is also explained.—*M. L. Kelly.*

4130. Schwartz, Solomon L., & Gekoski, Norman. (Temple U.) **The Supervisory Inventory: A forced choice measure of human relations attitude and technique.** *J. appl. Psychol.*, 1960, 44, 233-236.—Having human relations knowledge and skill for content, forced choice type items, and provisions for minimizing bias and fakability; the Supervisory Inventory was put to the test following its construction. The criteria used were ratings by supervisors of supervisors and productive characteristics. 131 supervisors were Ss in the constructive phase; 73 supervisors in a different plant participated in the validation. "Although further refinement and validation are necessary, the present validities obtained are very encouraging."—*J. W. Russell.*

4131. Sexton, Richard, & Staudt, Virginia. (Fordham U.) **Business communication: A survey of the literature.** *J. soc. Psychol.*, 1959, 50, 101-118.—Research on effective communication and the importance of practical considerations involved including methods, semantics, content, failure, and training are summarized and areas of current research needs indicated. (178 ref.)—*J. C. Franklin.*

4132. Tead, Ordway. (Harper & Bros., NYC) **The ethical challenge of modern administration.** *Advanc. Mgmt.*, 1960, 25(10), 8-10.—The ethical challenge is that of certain declared moral and ethical intentions of our democratic American society. Among these are that each person is autonomous, an end in himself with purposes of self-fulfillment, growth, and self-actualization which take precedence over ends of all organizational dominances. Although

in any formal organization the individual has limited freedom within which he has to assume responsibility, he should be provided freedom to be creative in his own unique way for the function he is assigned to perform. The squaring of organization objectives with personal careers and the enrichment of the human situation is the consummation of administrative power.—*E. Q. Miller.*

4133. Ward, Lewis B. (Harvard U.) **Putting executives to the test.** *Harv. bus. Rev.*, 1960, 38, 6-15, 164-180.—A sample of 1861 businessmen responded to a questionnaire survey on the uses and consequences of psychological testing in industry. A smaller number of interviews were also conducted among high level executives. The majority of companies represented are using tests for several purposes. The great bulk of executives have been favorably exposed to them and are favorably disposed toward them. They also say they are aware of dangers in the uncritical application of test results in place of thoughtful judgment.—*C. F. Youngberg.*

4134. Wiksell, Wesley. (Louisiana State U.) **Do they understand you?** New York: Macmillan, 1960. ix, 200 p. \$4.95.—Intended "as a basic text for short courses in face-to-face business and industrial communication." Presents "specific suggestions for achieving improved communications."—*C. T. Morgan.*

4135. Wright, Moorhead. (Crotonville Facility Operation, General Electric Co., Ossining, N.Y.) **Individual growth: The basic principles.** *Personnel*, 1960, 37(5), 8-17.—From an intensive analysis of how people grow in business, General Electric Co. has formulated 10 basic principles: (1) Development is an individual matter; (2) All development is self-development. (3) Development programs cannot be based upon any set of ideal personality traits. (4) Day-to-day work is the chief source of development. (5) Opportunity for development must be universal. (6) The present job, rather than the promotional ladder, must be emphasized. (7) Managing is a distinct kind of work. (8) Decentralization of decision making is a prime instrument of development. (9) The responsibility for development belongs to the line manager. (10) Development involves moral and spiritual values. These 10 principles are suggested as guides for those interested in the development of people.—*V. M. Staudt.*

4136. Yoder, D. **Ou vont les relations industrielles aux États-Unis?** [What is the direction of industrial relations in the United States?] *Travail hum.*, 1960, 23, 193-205.—The writer feels that, great as changes have been in the past 25 years, the next 25 will show even greater developments. He predicts management striving for more specialized professional competence, and sharper distinctions between ownership and management. The general manager will coordinate the contributions of staff managers. Unions will have more career leaders, will become less of a fraternal-type organization, and will have increasing responsibility for economic stabilization. Educational programs will include both union and managerial leaders.—*R. W. Husband.*

(See also Abstracts 2965, 3358, 3370, 3371, 3373, 3653, 3803, 4096)

## ENGINEERING PSYCHOLOGY

4137. Abbey, D. S., & Cowan, P. A. **Incomplete visual feedback and performance on the Toronto Complex Coordinator.** *Percept. mot. Skills*, 1960, 11, 43-45.—"Two groups of male undergraduates ( $N_s = 10$ ) from the University of Toronto practiced for 20 min. on the Toronto Complex Coordinator. The apparatus was modified for one of the groups so that visual representation of S's control movements was made intermittent. In the second group, Ss were provided with continuous visual representation . . . of their tracking movements. As a group these latter Ss scored approximately 100% more matches per minute and were less variable in performance. These differences appear to be related to changes in tracking behaviour when visual feedback is incomplete and discontinuous."—C. H. Ammons.

4138. Allen, Patricia S., Bennett, Edward M., Kemler, Dorothy K., & Carter, W. K. (Tufts U.) **Forced-choice ranking as a method for evaluating psycho-physiological feelings.** *USAF WADC tech. Rep.*, 1959, No. 58-310. ix, 123 p.—"Multiple forced-choice ranking methods were employed to assess comfort inducing or inhibiting characteristics of operational aircraft seats. . . . Two kinds of stimuli were judged: (1) descriptive terms selected by S to describe the sitting experience, and (2) portions of the posterior surface of the body (these were selected by S according to comfort level). In this way, the relative comfort profile of body parts was developed and compared to various seats and lengths of sitting time. The resulting profile patterns could be used in predicting success of seat design and suggesting design modification." Ss were 24 males without previous experience in such seats and "who were representative of the range in height of U.S. Air Force personnel." (46-item bibliogr.)—M. B. Mitchell.

4139. Bamford, H. E., Jr. (Boeing Airplane Co., Seattle, Wash.) **Human factors in man-machine systems.** *Hum. Factors*, 1959, 1(4), 55-59.—"The field of human factors is analyzed in an effort to discover its scope and organization. Three orthogonal partitions of the field serve to define eight mutually exclusive, jointly exhaustive, and interdependent sectors. These are considered separately." It is suggested that the 8 sectors comprise at once a general definition of the field of human factors and describe the scope of this relatively new profession.—J. M. Christensen.

4140. Carter, Charles W. (Convair, San Diego, Calif.) **International list of human factors films.** *Hum. Factors*, 1960, 2(2), 62-69.—An annotated bibliography of films dealing with human factors problems is presented. The list is source categorized under: Government Agencies, Universities, National Societies, Industry—Aircraft, and Industry—General.—J. M. Christensen.

4141. Chapanis, A., & Lindenbaum, L. E. (Johns Hopkins U.) **A reaction time study of four control-display linkages.** *Hum. Factors*, 1959, 1(4), 1-7.—"Fifteen subjects were tested on each of four different wooden models of stoves containing various control-burner arrangements. The experiment measured reaction times and errors made by subjects who matched a control to a given burner as

quickly as possible. Subjects were tested for 80 consecutive trials. The data show significant improvement in performance throughout the 80 trials. No significant improvement is evident in the second half of the trials, i.e., for trials 41 through 80. Analysis of the data for trials 41 through 80 shows one control-burner arrangement to be superior to all the others. Another arrangement is significantly worse than the best, but better than the remaining two."—J. M. Christensen.

4142. Chapanis, A., Lucas, A., Jacobson, E. H., Mackworth, N. H., Ancona, L., & Iacono, G. (Johns Hopkins U.) **L'Automation, aspects psychologique et sociaux.** [Social and psychological aspects of automation.] Louvain, Belgium: Publications Universitaires, 1960. 113 p. Belg. Fr. 110.—A collection of papers resulting from the Fifteenth International Congress of Psychology held in Louvain in 1957. The papers are concerned with a variety of psychological problems associated with the increasing trend towards remote and automatic control of industrial, military and civilian machines, and vehicular equipment. Specific problems dealt with are man and machine responsibility sharing in system design; automation in the automobile industry; social psychological problems resulting from employee attitudes to technological change; and methods of research on human operator perceptual and response functions in tasks.—N. B. Gordon.

4143. Colquhoun, W. P. (Medical Research Council, Cambridge, England) **Temperament, inspection efficiency, and time of day.** *Ergonomics*, 1960, 3, 377-378.—Detection of signals in a vigilance task was related to a measure of "Unsociability" in the morning, but not in the afternoon. 102 Ss were used.—B. T. Jensen.

4144. Conrad, R. (Medical Research Council, Cambridge, England) **Experimental psychology in the field of telecommunications.** *Ergonomics*, 1960, 3, 289-295.—4 examples and results are cited: relative merit of telephone dialing and keying with and without letter prefixes, memory for numeric and alphanumeric numbers, relationship between operator level and time per call, and effect of machine lag upon letter-sorting performance. (see 35: 4192)—B. T. Jensen.

4145. Contini, Renato; Drillis, Rudolfs, & Slote, Lawrence. (New York U.) **Development of techniques for the evaluation of high altitude pressure suits.** *USAF WADC tech. Rep.*, 1959, No. 58-641. ix, 121 p.—"The daily variations in motivational state and incentives and inhibitions of the subjects become of extreme importance in the evaluation of pressure suits by psychophysiological measures." (115 ref.)—M. B. Mitchell.

4146. Dallenbach, J. **Mensurations fonctionnelles pour l'adaptation de la machine à l'homme.** [Functional measurements to adapt the machine to man.] *Bull. Cent. Etud. Rech. Psychotech.*, 1960, 9, 123-151.—It is not average anthropological dimensions which are needed in adapting machines to men but measurements within which 90 or 95% of workers could work comfortably on machines. Special equipment was used to take the measurements of a sample of workers from various regions of France.

Various tables of the limits have been worked out and are presented in the appendix.—*V. Sauna.*

4147. **Devoe, D. B., & Saul, E. V.** (USAF Cambridge Research Center, Bedford, Mass.) **The Tufts index to human engineering literature.** *Hum. Factors*, 1959, 1(4), 47-54.—This article briefly reviews some of the problems encountered in the development of a control system for human factors literature. The Tufts indexing and retrieval system for handling such problems is described. The indexing system is built around a topical outline (reproduced in the article) which embraces 15 major headings and numerous subheadings. It was developed to meet such problems as heterogeneity of subject matter, heterogeneity of used population, growth in the subject matter fields, addition of new areas, and efficiency in location and retrieval of items.—*J. M. Christensen.*

4148. **Gardner, Mark B.** (Bell Telephone Lab., Murray Hill, N.J.) **A study of talking distance and related parameters in hands-free telephony.** *Bell Sys. tech. J.*, 1960, 39, 1529-1552.—This paper outlines the problems and possible solutions of providing satisfactory hands-free operation of the telephone. Preference indications were obtained under 18 combinations of microphone and loudspeaker placement for 18 Ss with voice switching and 18 Ss without voice switching. The main finding was that proximity operation was favored under conditions of moderate to high reverberation, nonproximity operations under conditions of low reverberation.—*A. M. Small, Jr.*

4149. **Herman, E. E.** (Hughes Aircraft Co., Culver City, Calif.) **Prospectus for human factors in electronics.** *Hum. Factors*, 1960, 2(1), 9-13.—4 factors inhibiting the acceptance of human engineering in electronics are listed: not being brought into new programs early enough; lack of operational experience (often an invalid criticism); newness of roles with a resultant lack of appreciation for contributions human factors personnel can make in mission analysis, decision functions, etc.; and, finally, delegation of authority to personnel not qualified as "human factors specialists." 4 areas that will merit considerable attention by human factors specialists are: mission analysis, data handling, maintenance and check-out, and systems evaluation. In addition, it is suggested that more universities should establish formal human engineering training programs. Interim educational measures might include on-the-job training and company-sponsored part-time graduate study.—*J. M. Christensen.*

4150. **Mason, P. L.** **Group participation in decision making.** *Personnel pract. Bull.*, 1960, 16(3), 27-32.—This is a summary of studies having to do with this topic. (22 ref.)—*J. L. Walker.*

4151. **Page, J. K.** (U. Liverpool, England) **Some ergonomic problems confronting the building designer.** *Ergonomics*, 1960, 3, 133-140.—"This article directs attention to needed fields of study. Discusses problems of workman (environmental, materials handling, and safety) and factors affecting the users of buildings (anthropometric, energy expenditure, and environmental factors)." (18 ref.)—*B. T. Jensen.*

4152. **Rohles, Frederick H., Jr.** (Aeromedical Field Lab.) **Behavioral measurements on animals participating in space flight.** *Amer. Psychologist*, 1960, 15, 668-669.—A twofold mission was established for a branch of the Aeromedical Field Laboratory: "(a) to measure animal behavior as affected by acceleration, noise, vibration, weightlessness, ionizing radiation, temperature extremes, and other environments peculiar to space flight; (b) to adapt standard laboratory apparatus for use in these environments. . . . In adapting laboratory equipment for use in a space vehicle special consideration has to be given to volume, weight, and reduced electrical power." A miniaturized operant chamber for a mouse was developed and is shown in a figure. Special problems of engineering psychology applied to outer space flight are indicated.—*S. J. Lachman.*

4153. **Taylor, Franklin V.** (USN Research Lab.) **Four basic ideas in engineering psychology.** *Amer. Psychologist*, 1960, 15, 643-649.—4 most significant ideas in engineering psychology relate to: (a) the limited flexibility of the man, (b) the concept of the man-machine system, (c) the importance of human input-output relationships, and (d) the use of engineering models to describe the behavior of the human elements within a system. Major sections are: The Human has Limitations, The Concept of the Man-Machine System, Input-Output Relationships, Use of Engineering Models. (3 fig.)—*S. J. Lachman.*

4154. **Tilton, John R., & Jensen, Barry T.** (System Development Corp., Santa Monica, Calif.) **Facilitating self-evaluation in task-oriented group learning.** *Hum. Factors*, 1960, 2(2), 92-96.—Subsequent to simulated missions the participating air crews may or may not be given knowledge of recorded results and may or may not have a formal discussion period in which the mission is reviewed and suggestions for the modification of procedure are entertained. Each of these 4 possible combinations of knowledge of results and discussion were studied in an experiment which is reviewed but not presented in detail. It is tentatively concluded that the knowledge of results fed back to the crews should be demonstrably accurate, should not in itself imply standards of operation, and should not consist of a mass of apparently unrelated detail. Problems of leadership are also discussed.—*J. M. Christensen.*

4155. **Webb, Sam C.** (Emory U.) **The comparative validity of two biographical inventory keys.** *J. appl. Psychol.*, 1960, 44, 177-183.—The predictability of ACE scores, high school average grades and a math test, combined with a biography inventory, was tested against average grades for the 3 quarters of the freshman year at Emory University. A deviate and an external scoring key were compared. Over 500 hundred Ss for one year were compared with a similar number for another. Both keys yielded an improvement in predictability when the biographical inventory was included.—*J. W. Russell.*

(See also Abstracts 3057, 3068, 3070)

#### Systems

4156. **Flagle, Charles D., Huggins, William H., & Roy, Robert H. (Eds.)** (Johns Hopkins U.)

**Operations research and systems engineering.** Baltimore, Md.: Johns Hopkins Press, 1960. x, 889 p. \$14.50.—A set of 27 lectures delivered by 20 authors in a course for managers in government and industry. 7 chapters consider introductory topics such as the historical development and future of these fields, the crisis brought about by expanding knowledge, the recognition of system engineering as a field with principles and processes for solving unique problems, and surveys of present tools and techniques. 16 chapters discuss specific methodologies such as the use of mathematical and other models, statistics, quality control, computers, inventory systems, linear programming, queueing theory, simulation techniques, game theory, symbolic logic, design of experiments, human engineering, information theory, flow-graphs, and techniques for studying system dynamics, feedback, and stability. 4 chapters are case histories dealing with war games, hospital and newspaper operations, and the reporting system in a telephone company.—*R. L. McCornack.*

4157. Garvey, W. D. (USN Research Lab.) **A comparison of the effects of training and secondary tasks on tracking behavior.** *J. appl. Psychol.*, 1960, 44, 370-375.—In attempting to estimate what kind of a mechanism would best replace the human operator in a man-machine system, 6 sailors operated radar sets while their performance was studied by electronic computers (analog). The effects of training and secondary scores were studied in terms of errors. The type of mechanism it would take to replace the man depended upon the level of training the man had received.—*J. W. Russell.*

4158. Licklider, J. C. R. (Bolt, Beranek, & Newman, Inc., Cambridge, Mass.) **Man-computer symbiosis.** *IRE Trans.*, 1960, HFE-9, 4-11.—"Man-computer symbiosis is an expected development in cooperative interaction between men and electronic computers. It will involve very close coupling between the human and the electronic members of the partnership. The main aims are (a) to let computers facilitate formulative thinking as they now facilitate the solution of formulated problems, and (b) to enable men and computers to cooperate in making decisions and controlling complex situations without inflexible dependence on predetermined programs. In the anticipated symbiotic partnership, men will set the goals, formulate the hypotheses, determine the criteria, and perform the evaluations. Computing machines will do the routinizable work that must be done to prepare the way for insights and decisions in technical and scientific thinking."—*C. T. Morgan.*

4159. Muckler, F. A. (Martin Co., Baltimore, Md.) **Human factors research on weapon systems project teams.** *Hum. Factors*, 1959, 1(4), 28-31.—"The research role of the human factors specialist on weapon systems project teams has been the subject of misunderstanding. Bound by other project roles, time limitations, complexity of phenomena, inadequate methodology and facilities, human factors project research has often left much to be desired. If effective project research is to be accomplished, there is a need for the development of (1) generalized research and development tools and (2) specific and detailed criteria for research methodology for the test and evaluation of complex man-machine weapon systems."—*J. M. Christensen.*

4160. Pollack, I. (Operational Applications Office, USAF Command and Control Development Division) **Message uncertainty and message reception. II.** *Lang. Speech*, 1960, 3, 174-177.—(see 35: 273) "A previous experiment indicated (1) that the accuracy of message reception is relatively independent of the size of the message ensemble if the number of response alternatives is held constant; and (2) that the accuracy of monitoring performance is independent of the number of irrelevant response alternatives. The present study attempts to determine whether the same generalizations are warranted in the case where the message and response alternatives are randomly chosen from the English language. They are."—*A. E. Horowitz.*

4161. Taylor, F. V., & Birmingham, H. P. **That confounded system performance measure: A demonstration.** *Psychol. Rev.*, 1959, 66, 178-182.—Man's performance in a man-machine system has predictive value only in the system tested. What appears to be the same task in connection with another system may yield quite unexpected results. To demonstrate this, analogue computer programs were designed and the human operator replaced by a completely predictable amplifier. Several causes for the different results obtained with the different systems are analyzed.—*W. J. Koppitz.*

#### Displays

4162. Baker, C. H. (Defense Research Medical Lab., Toronto, Canada) **Maintaining the level of vigilance by means of artificial signals.** *J. appl. Psychol.*, 1960, 44, 336-338.—In improving the performance of radar operators, what is the influence of the person watching him? 2 conditions having 25 Ss each were established. In both Ss wore headphones. There were real and artificial signals. The experimental group only was given knowledge of results by a voice over the headphones. Differences in results were compared by half-hour periods of time. Increase of signal frequency was also a variable. The increase in signal frequency and knowledge of results both improved performance of radar operators.—*J. W. Russell.*

4163. Baker, Charles A., Morris, Dominic F., & Steedman, William C. (Aerospace Medical Lab., Wright-Patterson AFB, O.) **Target recognition on complex displays.** *Hum. Factors*, 1960, 2(2), 51-61.—This study was conducted to determine the speed and accuracy of form recognition as a function of: (a) the amount of distortion between the reference form and the target form, (b) the number of irrelevant forms in the target display, and (c) the stimulus properties of the forms involved. The stimulus forms were generated by filling in, on a statistical basis, some of the cells of a 90,000-cell matrix. The Ss were shown a reference photograph of a target and instructed to locate that target on a display containing numerous other forms. Both criterion measures, viz., search time and errors, increased as a function of: (a) an increase in the number of irrelevant forms on the target display and (b) an increase in the difference between the resolution of the reference form and that of the target display. A quantitative description of the targets, which can be used to predict relative target difficulty, was developed.—*J. M. Christensen.*



4164. Bernberg, R. E. (North American Aviation, Los Angeles, Calif.) **A comparison of three flight attitude displays.** *Hum. Factors*, 1960, 2(1), 14-17.—3 types of attitude displays (vernier side-scale, attitude ball, cross-hair bar) were evaluated in an X-15 flight simulator. 6 test pilots served as Ss. The task consisted of executing a simulated climb from zero to 25 degrees and holding the attained attitude for 60 seconds. The vernier scale was shown to be significantly superior to the other 2 in terms of deviation in pitch angle.—J. M. Christensen.
4165. Brown, I. D. (Medical Research Council, Cambridge, England) **Many messages from few sources.** *Ergonomics*, 1960, 3, 159-168.—"62 naval ratings served as subjects in testing comparative reaction time to single and combined displays (combined display required responding 'three' when two signal lights were turned on simultaneously). . . . When up to 7 alternative stimuli were presented the . . . displays were equally efficient, by the criterion of reaction time. However, when 15 alternative stimuli were possible, the (single) display showed a significant advantage."—B. T. Jensen.
4166. Bowen, H. M., Andreassi, J. L., Truax, S., & Orlansky, J. (Dunlap & Associates, Stamford, Conn.) **Optimum symbols for radar displays.** *Hum. Factors*, 1960, 2(1), 28-33.—"Experiments were conducted to determine: 1) sets of geometric symbols which can be discriminated from each other and recognized with high accuracy under a variety of display conditions, especially those involving degradation of the image in ways similar to those that occur on radar displays, and 2) the size and stroke width to height ratio desirable for symbols to be used on complex displays. The recommended symbols are illustrated in the report; symbol height should be  $\frac{1}{2}$  inch or more and the stroke width should be  $\frac{1}{4}$  to  $\frac{1}{2}$  of the height. Suggestions for combining auxiliary symbols with primary symbols are given."—J. M. Christensen.
4167. Churchill, A. V. (Defense Research Medical Lab., Toronto, Canada) **The effect of pointer width and mark width on the accuracy of visual interpolation.** *J. appl. Psychol.*, 1960, 44, 315-318.—In reading dials, how does the size of the pointer, compared to the size of the scale unit, and scale width, effect readability? 10 Ss were exposed to 17 experimental conditions involving differences in viewing distances, pointer position, pointer width, scale mark widths, and interval lengths. "The ratio of pointer width to scale unit width has an effect on the optimal length of interval for interpolation in tenths. . . . viewing distance might have an effect on optimal interval length."—J. W. Russell.
4168. Forbes, T. W., Gervais, Edward, & Allen, Terrence. (Michigan State U.) **Effectiveness of symbols for lane control signals.** East Lansing, Mich.: Author, 1958. 15 p.—This is a report of an experiment consisting of 2 parts: a laboratory study examined 6 selected symbols for reversing or clearing a lane of traffic, and a check of actual motorist reaction to the most effective signals when installed on a bridge. The efficacy of certain symbols not only showed to advantage in the laboratory but also in actual traffic.—D. E. Walton.
4169. Holstein, David. (IBM, Bethesda, Md.) **Effects of target width and crosshair width on tracking performance.** *J. appl. Psychol.*, 1960, 44, 365-369.—In improving the ability of radar operators to follow something appearing on radar screens, what is the best relative size of crosshair compared to that of the target? The use of the Optical Comparator provided close control over variables under investigation and allowed recording of time and error scores. "An analysis of variance performed on the recovery time scores indicates that the target width and crosshair width main effects and their interaction are not statistically significant factors. . . . There is a tendency for decreased recovery time as target width increases, and an indication of an optimum crosshair width within the range of  $\frac{1}{16}$ " and  $\frac{1}{8}$ ."—J. W. Russell.
4170. McColgin, Franklin H. (Columbia U.) **Movement thresholds in peripheral vision.** *J. Opt. Soc. Amer.*, 1960, 50, 774-779.—"An aircraft-type instrument, with a standard altimeter hand, was located at random positions on the concave, black surface of an 80-in. Fiberglass hemisphere. Four types of movement were investigated (clockwise and counter-clockwise rotation, vertical and horizontal motion). . . . the absolute velocity threshold of each type of movement was determined for each position using the method of limits. . . . The absolute threshold isograms on perimetric charts for both rotary and linear motion are elliptical in shape, with the horizontal axis approximately twice as long as the vertical axis. . . . Velocity and area swept by the instrument hand are significant factors in the perception of movement, but they are not similarly correlated for all types of movement."—D. S. Blough.
4171. Morrill, C. S., & Sprague, L. T. (Radio Corp. America, Burlington Lab.) **Operator preferences for movement compatibility between radar hand control and display symbology.** *J. appl. Psychol.*, 1960, 44, 137-140.—As determined by operator preferences, which of 2 ways of relating hand controls to what appears on a radar screen is better? 3 groups of Ss, totaling 62, were each exposed to 2 display control relationships. They considered a way to relate hand movements directly to what appeared on the screen to be best.—J. W. Russell.
4172. Mudd, S. A., & McCormick, E. J. (Purdue U.) **The use of auditory cues in a visual search task.** *J. appl. Psychol.*, 1960, 44, 184-188.—Can an operator in a man machine system monitoring an instrument display do it better if he has both auditory and visual cues? 50 college students were assigned randomly to one of 5 conditions tested. A simulated man machine visual display was used for visual search tasks; a headset was used for sound. "In general, it appears that auditory cueing can be used effectively in conjunction with a visual search task."—J. W. Russell.
4173. Nolan, Carson Y. (American Printing House Blind, Louisville, Ky.) **Readability of large types: A study of type sizes and type styles.** *Int. J. Educ. Blind*, 1959, 9(2), 41-44.—"264 large-type readers, ages 8 years, 9 months to 20 years, 9 months and grades 4 through 12, were utilized in a study of type characteristics. . . . Both legally blind and non-legally blind groups read 18-point type as rapidly as 24-point type . . . a common textbook type was read more rapidly than an experimental type."—Author summary.

4174. **Seminara, Joseph L.** (Lockheed) **Speed and accuracy of matching tactually coded related pairs of items.** *Engng. industr. Psychol.*, 1959, 1, 128-133.—Where a machine operator is required to mate related pairs of equipment components (e.g., test jacks and receptacles), color codes or other visual cues are provided for readily identifying correct pairs of items. In emergency situations, visual cues may not be available and tactual cues would be necessary. Using 6 blindfolded Ss it was found that matching of pairs of components identifiable by raised letters could be done accurately in reasonable periods of time, although longer periods than when visual cues are used.—*C. F. X. Youngberg.*

4175. **Seminara, J. L.** (Lockheed Aircraft Corp.) **Accuracy and speed of tactual reading: An exploratory study.** *Ergonomics*, 1960, 3, 62-67.—"Three male and three female subjects read words and letters using the tactual sense only. Data presented include speed and accuracy. Difficulties were experienced with certain letters and some words—particularly longer words."—*B. T. Jensen.*

4176. **Sidorsky, Raymond C., & Newton, John M.** (General Dynamics Corp., Groton, Conn.) **An investigation of the one-surface contact analog display for use in submarine depth control.** *Hum. Factors*, 1960, 2(2), 70-75.—Both military and civilian Ss performed simulated submarine-control tasks of depth-keeping and depth-seeking on the basis of information conveyed by a pictorial visual display. The display was a TV picture of a grid representing the "floor" beneath the submarine. The TV camera simulated depth by its height above the photographed grid and pitch by its viewing angle. Horizontal movement of the grid surface in the direction of the camera simulated forward movement of the submarine. While operator responses were qualitatively appropriate, the degree of precision required in the operational situation was lacking. It was concluded that auxiliary information is needed.—*J. M. Christensen.*

4177. **Siegel, A. I., & Crain, K.** (Applied Psychological Services, Wayne, Pa.) **Experimental investigations of cautionary signal presentations.** *Ergonomics*, 1960, 3, 339-356.—4 experiments are reported with respect to the effects of having a master cautionary signal. A master signal reduces the number of peripheral signals missed. Data are presented regarding effects of various arrangements of auditory and visual signals and of types of lettering on signals.—*B. T. Jensen.*

4178. **Tinker, M. A.** (U. Minnesota) **Legibility of mathematical tables.** *J. appl. Psychol.*, 1960, 44, 83-87.—How do variables such as type size, arrangement of numerals in columns, and space vs. space affect the readability of mathematical tables? 4 simulated pages of powers and roots were used with 246 university student Ss. The results of the 9 studies are described.—*J. W. Russell.*

4179. **Van Laer, John; Galanter, Eugene H., & Klein, Sherwin J.** (Naval Air Material Center, Philadelphia, Pa.) **Factors relevant to the development of aircraft warning and caution signal systems.** *Aerospace Med.*, 1960, 31, 31-39.—Differential characteristics of visual, auditory, tactual and other senses are discussed in terms of their feasibility

for use as warning and caution signals in aircraft. Research in these areas is suggested.—*A. Debons.*

4180. **White, Carroll T., & Ford, Adelbert.** (United States Navy Electronics Lab., San Diego, Calif.) **Eye movements during simulated radar search.** *J. Opt. Soc. Amer.*, 1960, 50, 909-913.—The electrical method of eye-movement recording (the electro-oculogram, or EOG) was utilized to study visual search behavior while Ss monitored simulated radar displays. Information was obtained regarding the pattern of search employed, and the spatial distribution and duration of fixations. These factors are discussed in regard to their effect on the detection of targets in displays of this kind.—*Author abstract.*

4181. **Willis, H. R.** (McDonnell Aircraft Corp., St. Louis, Mo.) **Operator trends in marking a moving scale indicator.** *Hum. Factors*, 1960, 2 (1), 34-43.—"Although the moving scale, fixed pointer, type of indicator is undesirable for normal use, occasions sometimes arise when it is appropriate, or its use is unavoidable. In one situation of this nature a dial required markings that would designate a quadrant on one side of 0 as North, and the other side as South. Another dial required markings on one side of 0 as Plus, and the other side as Minus. . . . A naive population of 40 randomly selected, male, senior high school students was used. Results showed that the right side of the moving scale should be marked N or + and the left side S or -. Peripheral information disclosed correlation between score obtained and scholastic performance."—*J. M. Christensen.*

4182. **Woessner, Barbara L., Ross, Sherman, & Andrews, T. G.** (U. Maryland) **Effects of speed-stress and display-control relationships on response discrimination.** *J. gen. Psychol.*, 1959, 61, 95-111.—36 college students served as Ss. "A horizontal display of five lights was presented to the S singly in a temporally predictable but spatially unpredictable manner." S was to respond by pressing an appropriate switch. The signals were presented at 3 rates and the responses were to conform to 3 display-control relationships (horizontal, vertical, and M pattern). As the rate of signal presentation and the apparent symmetry between the display and control patterns increased, performance accuracy decreased. Performance accuracy varied significantly with signal position. The most rapid rate of signal presentation was characterized by a steady improvement in performance, but the lesser rates showed a decline on the 3rd trial following improvement on the 1st 2 trials. No change was revealed in the perceptual field with change in display-control relationships, rate of signal presentation, or time on task. (21 ref.)—*H. Ruja.*

(See also Abstract 3044)

#### Controls

4183. **Baker, D. Frederick, & Crawford, Billy M.** (Aerospace Medical Lab.) **Range limitations of the CRL Model 8 master-slave manipulator with the seated operator.** *USAF WADC tech. Note*, 1959, 59-359. iii, 12 p.—A study was conducted to determine the extent of limitations upon the inherent work range of the master-slave manipulator (CRL Model 8) when the operator is seated.

Contours of effective performance areas in 5 horizontal planes were determined.—*Journal abstract.*

4184. Bobbert, A. C. (Netherlands Inst. Preventive Medicine, Leiden) **Optimal form and dimensions of hand-grips on certain concrete building blocks.** *Ergonomics*, 1960, 3, 141-148.—"Theoretical considerations led to the molding of 29 sets of hand-graphs, varying anthropometric data and hand positions. Two subjects performed a standard task; six subjects, in a follow-up study, tested lifting power possible with different grips. A specific block design is recommended for use in the building industry."—B. T. Jensen.

4185. Bradley, James V., Wallis, Ronald A. (Wright Air Development Center) **Spacing of push button on-off controls.** *Engng. industr. Psychol.*, 1959, 1, 107-119.—If buttons on aircraft control panels are spaced no more than 1½ in. between centers, those with ½ in. diameter would be superior to larger diameters. But if the designer allows for intercenter spacing of 2 or more in., buttons as large as 1 in. in diameter may be of equal or greater efficiency as compared with smaller controls. Errors can be expected to increase rapidly as the distance between push button centers is decreased below 1¼ in.—C. F. X. Youngberg.

4186. Klemmer, E. T. **Dynamic factors in force judgment.** *Percept. mot. Skills*, 1960, 11, 39-42.—"S's judgment (N = 16) in the force discrimination situation could be partially predicted from knowledge of the dynamic response characteristics, but only 6 to 11% of the uncertainty about S's call was accounted for even when the two best predictors (other than force itself) were combined. The best predictors . . . were peak velocity of movement and average velocity for the first half of the movement (or time for the first 45° of movement). The force build-up time, previous judgment and other measures were even poorer predictors of S's judgment on those trials in which the force itself was not changed."—C. H. Ammons.

4187. McFadden, E. B., Swearingen, J. J., & Wheelwright, C. D. (FAA Aeronautical Center, Oklahoma City, Okla.) **The magnitude and direction of forces that man can exert in operating aircraft emergency exits.** *Hum. Factors*, 1959, 1(4), 16-27.—Maximum pulling forces that adult males and females in various seated and standing positions can apply to aircraft exit handles were measured. 2 0.3 in. D-ring handles were used, 1 protected with a rubber cover that increased its diameter to 0.67 in. Females exerted 19% more force using the rubber-covered handle. No information on males. Reductions "obtained with the unprotected handle may be explained by the subjects' complaint of pain and moderate trauma to the hand." However, no controls for increased diameter afforded by the protective covering were introduced. Ss exerted 2 to 3 times as much force by jerking as by pulling steadily. Standing positions were better than seated positions and right-handed pulls were better than left-handed pulls (no information on preferred hand). Authors acknowledge that actual emergency conditions might alter the obtained maxima.—J. M. Christensen.

4188. Regan, James J. (Fordham U.) **Tracking performance related to display-control configurations.** *J. appl. Psychol.*, 1960, 44, 310-314.—

"The relative merit of six different display-control configurations was determined in a continuous tracking task using both pursuit and compensatory tracking, and position and rate control. Ninety-six Ss were tested, four on each of the 24 conditions of the experiment." The combined-joystick configuration and the position control were superior for all conditions. Negative and limited findings were described.—J. W. Russell.

4189. Singleton, W. T. (Coll. Aeronautics, Cranfield, England) **An experimental investigation of speed controls for sewing machines.** *Ergonomics*, 1960, 3, 365-375.—A series of experiments is reported; methods are described. How ergonomic studies can stimulate engineering development is pointed out.—B. T. Jensen.

#### WORK ENVIRONMENT & PERFORMANCE

4190. Barch, Abram M. (Michigan State U.) **Further studies of turn-signaling behavior.** *Pap. Mich. Acad. Sci. Arts Lett.*, 1959, 45, 303-311.—Signaling of a turn by automobile drivers at various types of intersections was studied. Relative frequency of turn-signaling for a given turn at a given intersection showed little change over periods up to 2 years. Signaling frequency was increased by the presence of a following car within 400 ft. Signaling distance was not related to signaling frequency and was an unstable measure over time.—A. M. Barch.

4191. Collins, J. B., & Langdon, F. J. (Dept. Scientific & Industrial Research) **A survey of drawing office lighting requirements.** *Trans. Illum. Engng. Soc., Lond.*, 1960, 25, 87-114.—Physical and subjective evaluations of visual conditions in 10 drafting rooms were carried out by trained lighting engineers. These results were compared with the corresponding reactions of the draftsmen who work in these rooms. General rules to produce satisfactory lighting and good user acceptance are given.—B. W. Wild.

4192. Conrad, R. (Medical Research Council, Cambridge, England) **Letter sorting machines: Paced, "lagged" or unpaced?** *Ergonomics*, 1960, 3, 149-158.—"Seven operators in postal system were observed every three months for four observations. Letter sorting machines were lagged—that is, built-in delay. From data of study and related work it is concluded that operators could have sorted more mail by using an unpaced procedure."—B. T. Jensen.

4193. Cope, F. W. (USN Air Development Center, Johnsville, Pa.) **Problems in human vibration engineering.** *Ergonomics*, 1960, 3, 35-43.—"Means of transmission of vibration from the environment to the human are discussed as are some effects of vibration on man and animals. Relation of experimental work to practical problems is mentioned and then several methods of vibration protection are described."—B. T. Jensen.

4194. Cotes, J. E., & Meade, F. (Medical Research Council, Penarth, Glamorganshire, England) **The energy expenditure and mechanical energy demand in walking.** *Ergonomics*, 1960, 3, 97-120.—"12 male subjects walking motor-driven treadmill at various speeds on the flat and downhill; some subjects also walked uphill. Discussion describes relationships among body proportions and pace at various

speeds and incline. An attempt is made to predict walking energy expenditure." (25 ref.)—*B. T. Jensen.*

4195. **Culbert, S. S., & Posner, M. I.** (U. Washington) **Human habituation to an acoustical energy distribution spectrum.** *J. appl. Psychol.*, 1960, 44, 263-266.—Do people become used to aircraft noises? "A group of 28 Ss showed a significant increase in tolerance for the jet-engine noise (in comparison to propeller noise) after two series of exposure trials a week for three consecutive weeks. The tolerance for the habituated group at the end of three weeks was also significantly greater than that shown by 20 control Ss tested then for the first time. A test using additional Ss in another experiment corroborated the results of the first test." People do tend to mind jet noise less with repeated exposure.—*J. W. Russell.*

4196. **Elliot, E.** (Admiralty Research Lab., Teddington, England) **Perception and alertness.** *Ergonomics*, 1960, 3, 357-364.—"The paper reformulates current ideas of perceptual organization in watchkeeping, and attempts to explain why there are discrepancies of the kind mentioned. Particular emphasis is placed on the type of investigation which needs to be pursued in order to resolve present difficulties."—*B. T. Jensen.*

4197. **Enoch, Jay M.** (Washington U. Medical School, St. Louis, Mo.) **Environmental stress as related to the visual mechanism.** *Hum. Factors*, 1960, 2(2), 76-83.—The effects of selected forms of environmental stress upon performance of a visual task are reviewed. Particular attention is devoted to those factors related to high-speed flight, high-altitude flight, and exposure to radiation. It is concluded that the finite response time of the O demands that: sensors with longer ranges be developed for use in high speed situations; the main problems in empty field, high speed viewing should have to do with increasing and maintaining O's efficiency during search; shielding against bright flashes of light should be provided whenever possible; and Os should be protected from invisible radiation.—*J. M. Christensen.*

4198. **Fine, B. J., Cohen, A., & Crist, B.** **Effect of exposure to high humidity at high and moderate ambient temperature on anagram solution and auditory discrimination.** *Psychol. Rep.*, 1960, 7, 171-181.—"Ten Ss were exposed for 6½-hr. periods on four successive days to ambient dry/wet bulb temperatures of 70°/53°F, 70°/68°F, 95°/70.5°F, and 95°/92°F with minimal wind. The four-day sequences was replicated four times . . . the order of the conditions differing for each replication. Ss performed an anagram and an auditory discrimination task immediately after entering and just prior to leaving the experimental situation. The intervening time was occupied by group performance of . . . the game of ghost. . . there was no increment or decrement in performance on either the anagram or auditory discrimination task that could be attributed to either high temperature or high humidity."—*C. H. Ammons.*

4199. **Fletcher, J. G., Lewis, H. E., & Wilkie, D. R.** (Defence Research Medical Lab., Toronto, Canada) **Human power output: The mechanics of pole vaulting.** *Ergonomics*, 1960, 3, 30-34.—

"Through use of slow-motion pictures, speeds, trajectories and centers of gravity were obtained for champion pole vaulters. Pole vaulting is described in terms of energy use, giving the characteristics of the most successful jump."—*B. T. Jensen.*

4200. **Fox, R. H.** (National Inst. Medical Research, London, England) **Heat stress and athletics.** *Ergonomics*, 1960, 3, 307-313.—A discussion of the mechanism of body cooling and acclimatization to heat precedes analysis of some problems of the marathon runner at the Rome Olympics. (19 ref.)—*B. T. Jensen.*

4201. **Frankenhaeuser, Marianne; Graff-Lonnevig, V., & Hesser, C. M.** (Karolinska Inst., Stockholm, Sweden) **Psychomotor performance in man as affected by high oxygen pressure (3 atmospheres).** *Acta physiol. Scand.*, 1960, 50, 1-7.—"Psychomotor performance (simple and choice reaction times and mirror drawing) of 10 subjects during exposure to oxygen at 3 atmospheres was compared with performance under normal air breathing at 1 atmosphere. No statistically significant differences in psychomotor performance under the two conditions could be demonstrated. Nor did performance show any tendency to deteriorate with time within the 30 min. period employed. The possible importance of these observations as criteria of concomitant physiological events is discussed." (20 ref.)—*C. T. Morgan.*

4202. **Graybiel, Ashton; Clark, Brant, & Zariello, J. J.** **Observations on human subjects living in a "slow rotation room" for periods of two days: Canal sickness.** *USN Sch. Aviat. Med. res. Rep.*, 1959, Proj. No. MR005.13-6001, Sub. 1, No. 49. ii, 38 p.—"Five healthy subjects, and one control subject with vestibular function loss, were subjected to rotations varying from 1.71 rpm to 10.0 rpm in an effort to investigate consequences of prolonged constant rotation of human subjects in a slow rotation room. Symptoms reported by the healthy subjects arose directly or indirectly as a result of stimulation of the semicircular canals; thus, the term canal sickness is a useful designation." The experimental procedure holds promise of usefulness in studies of orbiting, of semicircular canals, of motion sickness, and of the brain stem activating system.—*L. Shatin.*

4203. **Grieve, J. I.** (P.O. Research Station, Dollis Hills, London, England) **Thermal stress in a single storey factory.** *Ergonomics*, 1960, 3, 297-306.—Environment conditions and energy expenditure were measured in different parts of the shop where work stress differed. Measurements and findings are described. The discussion indicates changes made.—*B. T. Jensen.*

4204. **Grundy, J. T.** (Associated Electrical Industries, Ltd.) **Application of regulations relating to the lighting of ships.** *Trans. Illum. Engng. Soc., Lond.*, 1960, 25, 115-130.—A review of the problems of lighting ships to meet navigational and safety requirements and to meet the comfort needs of passengers and crew.—*B. W. Wild.*

4205. **Hanna, Thomas D., & Gaito, John.** (U. S. Naval Air Material Center, Philadelphia, Pa.) **Performance and habitability aspects of extended confinement in sealed cabins.** *Aerospace Med.*, 1960, 31, 399-406.—6 naval enlisted men worked in a simulated space flight conditions for 7 days. Psychomotor and intellectual functions did not deteri-



orate under less than optimum physical conditions. More extended test periods with more complex tasks to be undertaken by the Ss are recommended.—A. Debons.

4206. Hopkinson, R. G. (Dept. Scientific & Industrial Research) **A note on the use of indices of glare discomfort for a code of lighting.** *Trans. Illum. Engng. Soc., London*, 1960, 25, 135-138.—The use of a glare index is advised in place of the more customary tables of recommended illumination.—B. W. Wild.

4207. Kaehler, R. C. (U. Southern California) **The effects of transverse accelerations and exponential time-lag constants on compensatory tracking performance.** *Dissertation Abstr.*, 1960, 21, 1637.—Abstract.

4208. Kidd, J. S., & Kinkade, Robert G. (Ohio State U.) **Operator change-over effects in a complex task.** *USAF WADC tech. Rep.*, 1959, No. 59-235. iv, 12 p.—12 undergraduates trained as controllers performed a simulated air traffic control task with no fatigue decrement over a 3.5 hr. work period, but with a prominent "end-spurt." During the first 5 minutes after controllers were changed there was a loss in performance. When the replacement operators were phased-in gradually, this loss was reduced in proportion to the amount of participation, but not completely eliminated. The best results were obtained when the replacement tended the standby radar scope for 6' then began taking over the new entries. The least improvement occurred when the replacement merely listened in on the radio for 10'—M. B. Mitchell.

4209. Krendel, E. S. (Franklin Inst., Philadelphia, Pa.) **Design requirements for man generated power.** *Ergonomics*, 1960, 3, 329-337.—Man must generate power as well as control. A review of some conditions to transferring power, of characteristics of muscles, and of some available data are presented. (15 ref.)—B. T. Jensen.

4210. Lippold, O. C. J., Redfearn, J. W. T., & Vuco, J. (University Coll., London, England) **The electromyography of fatigue.** *Ergonomics*, 1960, 3, 121-132.—"Mechanical and electrical recordings were made of male and female subjects. Results are discussed in terms of alteration in form of action potentials, synchronization of motor units, effect on the integrated EMG, and fatigue in different muscles."—B. T. Jensen.

4211. Murrell, K. F. H., & Tucker, W. A. (U. Bristol, England) **A pilot job-study of age-related causes of difficulty in light engineering.** *Ergonomics*, 1960, 3, 74-79.—"Studies of age and job in light engineering industry have shown that some jobs are typically manned by younger men. Fifteen factors associated with the work of 853 machinists were rated independently by two investigators. Nine factors were discarded because of lack of variation or requirements for detailed measurement. Four of the remaining factors appear to be age-related."—B. T. Jensen.

4212. Pepler, R. D. (Dunlap & Associates, Stamford, Conn.) **Warmth, glare and a background of quiet speech: A comparison of their effects on performance.** *Ergonomics*, 1960, 3, 68-73.—"Twelve subjects in each of two experiments performed a

tracking task in normal and warm environments. In experiment 1 glare was introduced in the middle 20 minutes; in experiment 2 the distraction consisted of soft speech. Different effects were noted."—B. T. Jensen.

4213. Rath, R. (Ravenshaw Coll., Orissa, India) **Measure of similarity in work curves.** *J. gen. Psychol.*, 1959, 61, 39-44.—S. J. F. Philpott's hypothesis that work curves consist of random samples of cycles drawn from a hypothetical pool of general purpose waves is confirmed. Data came from the performance of two Ss on 4 mental tasks.—H. Rujia.

4214. Redfearn, J. W. T. (Army Operational Research Group, Surrey, England) **The eosinopenia of physical exercise.** *Ergonomics*, 1960, 3, 17-29.—"An eosinophil count was made on soldiers in several conditions: on days of rest, on days on which overland marches were made, on treadmills adjusted to provide different task conditions, and marching to exhaustion: Results are reported and research procedures described."—B. T. Jensen.

4215. Roberts, D. F. (U. Oxford, England) **Functional anthropometry of elderly women.** *Ergonomics*, 1960, 3, 321-327.—To obtain anthropometric data for the design of flats to be occupied by old people living alone 78 residents of 1 such group of units showed considerable differences between them and younger persons. Data and descriptions of measures are reported.—B. T. Jensen.

4216. Simons, John C. (Aerospace Medical Lab., Wright-Patterson AFB, O.) **Walking under zero-gravity conditions.** *USAF WADC tech. Note*, 1959, No. 59-327. iii, 8 p.—Permanent magnetic sandals . . . enable a man to walk with an approximately normal gait under weightless conditions. All 4 S reported an immediate spatial orientation of "down" being where their feet were, as soon as their body rotation stopped. A basic index was formulated to define magnetic requirements . . . to hold a subject stationary. A vector analysis of the 1-g walking gait is made, and elements of a zero-gait for further study using variable power electromagnetic shoes are proposed.—USAF WADC.

4217. Tobias, Paul. (U. Southern California) **Effects of radiation on performance.** *Hum. Factors*, 1959, 1(4), 8-15.—Experimental studies on the effects of various types of radiation on performance are reviewed. It is suggested that most of the studies fail to control adequately for 1 or more of at least 11 confounding variables (i.e., altered motivation, species differences, rate of absorption, etc.) In addition, there is often no assurance that the measures used were sensitive enough to detect other than gross changes in performance. Keeping in mind these limitations, the evidence seems tentatively to indicate decrements in conditioning, discrimination and activity, and manipulation tasks; while effects on maze learning varied (depending on species and dosage) from decrement to improvement in different experiments. Some requirements for adequate experimentation in this area are outlined.—J. M. Christensen.

4218. Veil, Claude. (French League Mental Hygiene, Paris, France) **Aspectos medicopsicológicos de la industrialización moderna.** [Medicopsychological aspects of modern industrialization.] *Rev.*

*Psicol. gen. apl., Madrid*, 1958, 13, 791-814.—One of the most serious problems of industrialization is the adaptation of man to machine and work procedures. Human relations difficulties, health, insecurity, and other problems endanger the nervous equilibrium of the worker. Ways of dealing with these psychological problems preventively are discussed. (55 ref.)—B. S. Aaronson.

4219. Wachslar, R. A., & Learner, D. B. (General Motors Technical Center, Warren, Pa.) **An analysis of some factors influencing seat comfort.** *Ergonomics*, 1960, 3, 315-320.—18 Ss using different seats reported comfort ratings of seats and discomfort in specific body parts. Factor analysis of inter-correlations of 11 variables suggests 2 factors, one of which seems unrelated to overall comfort.—B. T. Jensen.

4220. Waldram, J. M. (General Electric Co., Ltd.) **A note on calculations of disability glare, veiling and contrast.** *Trans. Illum. Engng. Soc. Lond.*, 1960, 25, 131-134.—A graphical method of plotting object and background luminance to obtain the effects of disability glare and veiling haze is presented.—B. W. Wild.

4221. Warburton, F. W. **Examination of Philpott's theory of the work curve by orthodox statistical techniques.** *Percept. mot. Skills*, 1960, 11, 29-30.—"Recent data on fluctuations in mental work utilizing current statistical techniques are presented and discussed in terms of Philpott's previous work."—C. H. Ammons.

4222. Wilkie, D. R. (University Coll., London, England) **Man as a source of mechanical power.** *Ergonomics*, 1960, 3, 1-8.—"Information about mechanical horsepower produced by a man is given for several tasks. Physiological bases of muscular exercise and experimental data are included."—B. T. Jensen.

(See also Abstract 3152)

#### ACCIDENTS & SAFETY

4223. Banarjee, Debabrata. (Calcutta, India) **Study of reaction-time and concrete intelligence upon accident causation of some industrial workers.** *Indian J. Psychol.*, 1956, 31, 136-138.—In a group of 72 factory workers, intelligence did not correlate significantly with accident-rate. A significant negative correlation ( $-.54$ ) was obtained between reaction-time and accident rate.—C. T. Morgan.

4224. Crawford, Paul L. (Ohio Power Co., Portsmouth) **Hazard exposure differentiation necessary for the identification of the accident-prone employee.** *J. appl. Psychol.*, 1960, 44, 192-194.—Because the theoretical and actual accident distributions for 737 workers were so much alike and few accident-prone individuals were identified, a criterion-group study of personality differences by accident-proneness was impractical. The importance of this controlling of the hazard-exposure variable was emphasized.—J. W. Russell.

4225. Forbes, T. W. (Michigan State U.) **Human factors in highway design, operation and safety problems.** *Hum. Factors*, 1960, 2(1), 1-8.—On urban freeways, peak hour traffic leads drivers to operate vehicles at time spacing less than their fastest emergency reaction time. Factors affecting speed

and accuracy of driver judgment and response have become critical. Driver perception, judgment, and response time (measured by driver lag in acceleration and deceleration) can be affected by highway design features. Experimental studies of factors affecting driver responses when combined with mathematical analyses based on such driver-vehicle-highway responses may explain differences in maximum traffic flow at which self-limiting stoppage occurs without adequate physical causes in heavy traffic. Human engineering data suggests ways of obtaining more efficient driver-vehicle-highway-environment interrelationships and, thereby, more efficient and safer operation of highways. Examples of such information and studies are given.—J. M. Christensen.

4226. Hakkinen, Sauli. (Inst. Occupational Health, Helsinki, Finland) **Traffic accidents and driver characteristics.** (Scientific Research No. 13) Helsinki, Finland: Finland's Institute Technology, 1958. ix, 199 p. \$3.00.—This monograph presents a study of traffic accidents in 2 parts: a statistic study of traffic accidents from data collected on about 1000 bus and tram drivers and an experimental study of 1000 of these drivers in which 14 tests were used, many of them new. Detailed treatment of about 300 variables gave significant differences between groups of safe drivers and the accident drivers. The interdependence of the most important variables was investigated by means of correlation and factor analysis; cross-validation studies were done. Motor hastiness and distractability were among factors reportedly giving rise to accident proneness of drivers.—D. E. Walton.

4227. Kundu, Ramanath. (Calcutta, India) **A study of accident susceptibility by word association test.** *Indian J. Psychol.*, 1958, 33, 249-257.—The word associations, and the reaction times of associations, were recorded for a test of 20 words on 3 groups of workers: one without accidents, another with 1 accident, and another with more than 1 accident. Certain associations appeared to distinguish among the groups; so did reaction times to certain words.—C. T. Morgan.

4228. Lauer, A. R. **The psychology of driving: Factors of traffic enforcement.** Springfield, Ill.: Charles C Thomas, 1960. xxvii, 324 p. \$10.50.—A collection of papers published elsewhere by the author and his students based for the most part on experiments or statistical analyses. A run-down of psychological categories involved in safe driving such as perception, motor skill, personality, and emotion. History of driving laboratories and description of a wide range of tests and driver training programs. Hints on public relations for law enforcement people and traffic engineers. Legibility of license plates—size and proportion of numerals, shape, and color. Individual differences in drivers—some can go faster with impunity; sex differences are most pronounced with youth and females are superior. Detailed technical description of 1 experiment on rest pauses. Various comments or proposals regarding safety, for example: attitudes are more important than skill, drivers' licenses might be graded for different levels of proficiency, the city border is a critical point because of shift from rural to urban driving, objects along the roadside facilitate perception of how one is driving. Except for 1 chapter, the book is written

down for the lay reader rather than the professional psychologist. The need for more experimental work is stressed throughout.—H. E. Burtt.

4229. Porterfield, A. L. (Texas Christian U.) **Traffic fatalities, suicide and homicide.** *Amer. sociol. Rev.*, 1960, 25, 897-901.—Assuming "that a significant number of drivers of 'death dealing' cars, as well as their victims, have attitudes similar to those who become involved in suicide and homicide," age-adjusted rates of death from motor vehicle accidents were compared with suicide and homicide rates for white males and females in the 60 largest United States metropolitan centers in the 1949-51 period. The comparisons also were made by states. The obtained correlations were significantly positive. It is suggested that "aggressive, hazardous driving is likely to be characteristic of persons similar to those who have suicidal or homicidal or both tendencies—and vice versa."—L. Berkowitz.

4230. Solem, A. R. **On frustration effects in accident behavior.** *Psychol. Rep.*, 1960, 7, 142.—"Each of 17 male Ss were given approximately 200 trials on an apparatus which called for a precise and delicate motor response to a visual problem. . . . With continued failure to solve the visual problem, (a) 'hypotheses' as to the solution tended to become simpler and (b) motor responses, as measured by shock frequency and kymograph recordings, increased in variability and intensity. Nevertheless, the experiment is merely exploratory and cannot be considered a valid test of frustration effect since there was no evidence either from observation or in the data, that the frustration threshold for any S was exceeded."—C. H. Ammons.

#### ADVERTISING & CONSUMER PSYCHOLOGY

4231. Baker, G. A., Amerine, M. A., Roessler, E. B., & Fillipello, F. (U. California, Davis) **The nonspecificity of differences in taste testing for preference.** *Food Res.*, 1960, 25, 810-816.—"Attention has been called to the confusion that may arise in consumer preference testing due to difference in direction of preference and subliminal considerations. An operationally meaningful method of structuring a definite universe of potential consumers has been given with a suggestion as to how to test an observed structure against any hypothetical or other observed structure." The method is demonstrated through application in an experiment on food preferences.—D. R. Peryam.

4232. Bryan, Glenn L., & Rigney, Joseph W. (U. Southern California) **Emotional behavior of airline passengers.** *Aerospace Med.*, 1960, 31, 123-126.—Emotional behavior of airline passengers is surveyed to determine the influence of hostess reaction to them. Types of emotion displayed are categorized. Implications of how advances in air travel will affect the role of the hostess in meeting the problems caused by emotional behavior of passengers are discussed.—A. Debons.

4233. Cozan, Lee W. (United States Dept. Health, Education, Welfare, Washington, D.C.) **Type of mailing and effectiveness of direct mail advertising.** *J. appl. Psychol.*, 1960, 44, 175-176.—Does 1st-class mail yield higher responses than 3rd-class? A professional periodical tried it out in 2

experiments one using 10,000 units with 1st- and the other 10,000 with 3rd-class mail. 1st-class mail by far was the most effective.—J. W. Russell.

4234. Ferris, George. (General Foods Corp., White Plains, N.Y.) **A new model for consumer testing.** *Food Res.*, 1960, 25, 802-809.—A statistical model is proposed for application to consumer preference testing by the paired comparison method which permits estimation of: (a) proportions of consumers who can and cannot really discriminate between the samples, (b) proportion of non-discriminators who will behave as if they could discriminate, and (c) proportions of discriminators preferring each of the samples. The model is completely worked out, difficulties are discussed, and an example is calculated.—D. R. Peryam.

4235. **Foundation for Research on Human Behavior. The adoption of new products: Process and influence.** Ann Arbor, Mich.: FRHB, 1959. ii, 49 p. \$3.00.—The report of 2 seminars. The rate of adoption of new products, the kind of people who do the adopting, and the factors which influence the rate of adoption at various periods in the early life of a new product were studied, using midwest farmers as the research population. The rate of adoption was found to be determined by a constellation of decisions: the complexity of the change required by the new product, the risk, the cost, and the visibility of possible returns to the adopter. 5 types of adopters were identified according to time of their adoption of new products. These groups were characterized in terms of size of farm owned, amount of risk capital available, orientation to local community, mass media read or heard, sources of information used in learning about new products, etc. This book is of particular interest to social psychologists in the marketing field.—J. R. Cornog.

4236. Gruen, Walter. (Beth Israel Hosp., Boston, Mass.) **Preference for new products and its relationship to different measures of conformity.** *J. appl. Psychol.*, 1960, 44, 361-364.—How important is newness and conformity in determining consumer choice? Slides showing dated products were viewed by the 114 student Ss. "Ten undated control slides alternated with the random presentation of the other 20. The Ss were also given a scale measuring other-directedness, a behavior inventory which measured the degree to which they attributed personal or social reasons to a variety of behavior descriptions, and a scale measuring acceptance of so-called American core culture values. Some of the Ss were also subjected to the Asch conformity situation." A striking lack of evidence favoring conformity and newness motives was found.—J. W. Russell.

4237. Haskins, J. B. (Curtis Publishing Co., Philadelphia, Pa.) **Validation of the Abstraction Index as a tool for content-effects analysis and content analysis.** *J. appl. Psychol.*, 1960, 44, 102-106.—How does the degree of abstractness (Abstraction Index) of a magazine article affect reader interest and satisfaction? 340 readers of a magazine were interviewed about readership and satisfaction of items read. 10 hypotheses were tested. Abstractness discourages persistence but favors satisfaction. The Abstraction Index is useful.—J. W. Russell.

4238. Haskins, Jack B. (Curtis Publishing Co., Philadelphia, Pa.) **Title-rating: A method for**

measuring reading interests and predicting readership. *Educ. psychol. Measmt.*, 1960, 20, 551-565.—The development, validation, and cross-validation of a method for predicting actual readership of magazine articles is described. The method entails having Ss indicate degree of interest via a thermometer-type scale from reading magazine titles and subtitles. A verbal interest scale also tried did not prove to be a reliable predictor of actual reading behavior.—*W. Coleman.*

4239. Hattwick, Mel S. **The new psychology of selling.** New York: McGraw-Hill, 1960. 276 p. \$5.95.—A popular treatment of sales psychology. Numerous case histories, list of basic wants, specific sales training suggestions, and examples of applying psychology to sell intangibles.—*D. W. Twedt.*

4240. Heiskell, Andrew. (Time, Inc., Chicago, Ill.) **The role of marketing research in today's business management.** *Mich. State U. Bus. Top.*, 1959, 7(1), 13-20.—Management and researchers must learn to communicate if a major breakthrough in research is to be achieved. Often obsolete consumer data are used or research is done too late because management does not understand research. Today, hope is possible because of different scientific disciplines which are being applied to the problems of marketing. Our task now is to develop our ability to distribute and consume goods, rather than to produce more.—*M. F. Estep.*

4241. Levitt, Theodore. (Harvard U.) **Marketing myopia.** *Harv. bus. Rev.*, 1960, 38, 45-56.—Company leaders must find ways of uncovering the needs and wants of people and then satisfy these if the organization is to continue to grow and prosper. Consumer motivation studies should occupy a prominent place in the total marketing plan.—*C. F. Youngberg.*

4242. Sather, Lois A., & Calvin, Lyle D. (Oregon State Coll.) **The effect of number of judgments in a test on flavor evaluations for preference.** *Food Technol.*, 1960, 14, 613-615.—For each of 4 foods (canned peaches, hamburger, tomato juice, and green beans) 20 samples having known flavor differences were rated for preference by 175-190 untrained Ss. The 20 samples were divided into 4

groups and were judged in 1 continuous test period. Each group was presented in each possible order (1st-4th) an equal number of times. Significant preference differences were found within all groups of all products. With tomato juice, discrimination among samples in the 1st group was poorer than for the other groups; otherwise order did not significantly affect discrimination.—*D. R. Peryam.*

4243. Simone, Marion; Sharrah, Nancy, & Chichester, C. O. (U. California, Davis) **Instant bread mix: Consumer evaluation of prepared bread.** *Food Technol.*, 1960, 14, 657-661.—Instant breads made with 4 different flavoring preparations were evaluated for preference by a 12-member trained panel using the paired comparison method and by a consumer panel of 100 households. Each household used a different bread each week, and all family members rated degree of liking and opinions about texture on a 7-point scale. Both panels indicated the same flavor preparation as superior and the others as equal. Younger and older age groups rated the bread significantly higher than did the middle age groups; females rated it significantly higher than did males.—*D. R. Peryam.*

4244. Trier, Howard; Smith, Henry Clay, & Shaffer, James. (Mead Corp., Chillicothe, O.) **Differences in food buying attitudes of housewives.** *J. Market.*, 1960, 25(1), 66-69.—Housewives in Lansing, Michigan, were asked to rate on a 5-point scale 37 statements about the influences they felt in their food buying decisions. (The group of 242 women was selected to be representative of income groups in Lansing. The statements were selected on the basis of preliminary interviews and covered 8 areas of decision-making influences judged to be important.) The replies (ratings) were analyzed by Cattell's principle component method, and 8 factors were isolated. In order of importance of their influence (i.e., percent of variance accounted for) the factors were: cost of food, friends, parents, husband, food preparation time, food value, food quality, mass media. Some factors appeared to be related to certain socioeconomic variables, personality traits, and role- and self-perceptions.—*H. W. Daniels.*

(See also Abstracts 2896, 3778)



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<sup>1</sup> The letter (a) following entry numbers indicates citation of abstracts which are themselves primary publications; these are usually of theses or of papers read at professional meetings. The letter (b) indicates entries limited to bibliographic information.

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